Socially anxious adolescents’ perception of treatment by classmates

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Abstract

This study addressed the question if socially anxious adolescents have a negatively biased perception of the way they are treated by their peers. A total of 998 high school students from Grades 8–10 were categorized as socially low, middle, or high anxious on the basis of their SAS-A score. The perceived behavior of classmates was measured using three lists that described class behaviors during oral presentations of students, one list was concerned with the behaviors directed towards the student him/herself and the other two with behaviors directed towards a hypothetical high and low socially anxious peer, respectively. The results indicated that high socially anxious students felt negatively treated by their peers and that the other students too perceived that socially anxious classmates were treated more negatively. This suggests that the perception of the high socially anxious students is not distorted but based on the actual treatment they receive from their classmates.

Keywords: Adolescence; Peer relations; Perceptions; Social anxiety

Introduction

This study was aimed at gaining more insight into the relation between social anxiety and perception of peer behavior. The main question asked was if socially anxious adolescents in comparison to the non-anxious students in their class have a negative perception of their classmates’ behavior directed towards them. Previous research has shown that socially anxious people display an information processing bias with regard to other persons’ reactions. Because socially anxious individuals have a negative opinion about their own performance, they assume that other people think in the same negative way about them and therefore interpret other persons’ behavior in a negative way; see Hirsch and Clark (2004) for a recent review of the literature. Two important cognitive models of social anxiety state that in an anxiety-provoking social situation, socially anxious individuals are self-focused and therefore do not pay due attention to social cues in other persons’
behavior (Clark & Wells, 1995; Rapee & Heimberg, 1997). As a consequence, they are not easily corrected in their thinking when they are treated in a more positive way than they expect.

The negatively biased perception of socially anxious individuals has been demonstrated in several studies (e.g., Christensen, Stein, & Means-Christensen, 2003; Perowne & Mansell, 2002; Spence, Donovan, & Brechman-Toussaint, 1999). For example, Perowne and Mansell conducted a study that manipulated the behavior of the audience in order to investigate low and high socially anxious participants’ attention to social cues. The participants in that study were university students with non-clinical high and with low social anxiety. The participants gave a speech to a “make believe” audience that had been videotaped beforehand and that was presented to them as a live audience present in another room. Part of the confederates in the audience demonstrated negative behaviors, part showed positive behaviors, and part presented neutral cues. Overall, the high anxious participants rated the appreciation of their speech by the audience as negative and the low anxious participants rated the same responses of the same audience to their speech as positive. This is remarkable; the more so because the two groups did not differ as far as the detection of the emotional cues of the audience, like yawning, looking at watch, was concerned. Furthermore, the high anxious group perceived a difference in appreciation between the negatively behaving confederates on the one hand and the neutral and positively behaving confederates on the other hand. The low anxious group discriminated between the neutral and negative confederates on the one hand and the positive confederates on the other hand. This suggests that the high anxious participants’ interpretation of audience behavior was biased in the sense that it was based on the negatively behaving confederates and the low anxious participants’ interpretation on the positive confederates.

There is, however, also some research that appears to indicate that the socially anxious person’s negative expectations of other people’s judgments towards them are not entirely biased. For example, Norton and Hope (2001) asked adults with a social anxiety disorder, individuals with dysthymia, and non-clinical controls to give a speech and to take part in two role-playing situations. The authors compared persons’ self-ratings of social performance and anxiety with independent observer ratings. The findings indicated that the socially anxious group showed a negative bias in their self-ratings because they were more negative about their performance than the independent observers were. However, the results also showed that their negative self-evaluation was not completely unfounded. The observers did notice some differences in social performance between the three groups with the socially anxious group being rated more negatively than the other two groups. The authors therefore concluded that the negative self-image of socially anxious individuals could not completely be ascribed to distorted perceptions. There is a “kernel of truth” in their perceptions; that is to say that their negative self-ratings are at least partly accurate.

Christensen et al. (2003) further investigated this kernel-of-truth hypothesis contrasting it with the self-focused attention hypothesis. In their study, the perceptions of a non-clinical group of high socially anxious university students were compared to those of a control group of students with normal levels of social anxiety. In pairs of two the participants were asked to have a conversation with the other participant. Afterwards they rated their own performance, the performance of their partner, and the way they thought they were evaluated by their partner. It was found that the perceptions that the socially anxious participants had of other persons’ responses towards them were related to their own negative self-evaluations. Their interaction partners did not judge them in the negative way the socially anxious individuals assumed. However, their negative interpretations of their partner’s evaluation of them were not completely unfounded. Their partners did rate them as more nervous and less sociable. So, the socially anxious students did have some reason to feel that other people had a negative opinion about them.

The kernel-of-truth hypothesis was also supported in the study by Spence et al. (1999). They told 7–14-year-old children—a group with social phobia and a group of normal controls—that they would be evaluated by peers. The children did a reading task and participated in role-playing tasks. In this study, the social phobic children did have a negative opinion about their own performance. Furthermore, it was clear from several sources, among which parents and independent raters, that the anxious children were indeed less competent as far as their social performance was concerned. Thus, their perception of their role-playing performance was not completely negatively biased. However, in the case of the reading task, their negative self-evaluations could not be explained by a poor reading performance suggesting that their perceptions were at least partly distorted.
The reported studies seem to indicate that socially anxious individuals, adults and children alike, have negatively biased opinions about their own role in social-evaluative situations. More specifically, socially anxious individuals think that their interaction partners have a low appreciation of their performance. At the same time, the studies suggest that the negative cognitions are not completely unfounded, as raters in most studies did report differences between anxious and non-anxious persons’ social behavior. Hence, there seems to be some truth in the negative self-evaluations of socially anxious individuals.

Studies on the biased perception of socially anxious persons like the ones reviewed above have exclusively focused on the evaluation of the socially anxious person’s performance. Other people’s behavior towards the socially anxious person was not included. This is remarkable; because it is not unlikely that other people’s behavior actually causes or at least helps to maintain socially anxious individuals’ negative self-perception. Some studies show that the behavior directed to socially anxious individuals is relatively negative. For example, Strauss, Lahey, Frick, Frame, and Hynd (1988) showed that children with anxiety disorders were less liked and were neglected by their classmates. Spence et al. (1999) reported that socially anxious children were less positively treated in interactions with their peers than non-anxious children. Gazelle and Ladd (2003) found bi-directional relationships between anxious withdrawal and peer exclusion. Spence et al. and Gazelle and Ladd argued that children who keep to themselves a lot are seen as deviant and are therefore less liked and excluded. As a consequence, the anxious child is confirmed in his/her beliefs and reacts with even more social withdrawal. In short, these studies suggest that socially anxious persons might have some reason to be afraid of interacting with others and feel negatively evaluated.

Present study

The present study was designed to learn more about the link between socially anxious adolescents’ negative perceptions on the one hand and the way they are treated by others on the other hand. We chose adolescent participants because the findings of recent research have indicated that the normal fear of negative social evaluation increases during the teenage years (Westenberg, Drewes, Goedhart, Siebelink, & Treffers, 2004). Likewise, the prevalence of social anxiety disorders also increases during these years (Lecrubier et al., 2000; Ollendick, King, & Yule, 1994). It is conceivable that the adolescence-bound increase of normal social fear and social anxiety disorder is related to an increasing awareness of peer behavior. Adolescence is a period in which peer acceptance and the pressure to conform are even more important than they are at other periods in life (Ollendick & Hirshfeld-Becker, 2002). The present study asked how socially anxious adolescents experience the way they are treated by their peers and whether their perceptions of peer behavior correspond with the perceptions these peers have of the treatment of socially anxious persons.

The study’s method differed from earlier ones in this domain in two significant ways. First, the study focused on adolescents’ perception of specific peer behavior instead of on the perception of peer evaluation. By paying attention to the way they are treated, in their own perception and that of others, it might become clear if there are actual cues in other people’s behavior that make socially anxious people think that they are negatively evaluated by others. Furthermore, it is important to know whether non-anxious peers share the perception of socially anxious adolescents that they are treated in a negative manner. Thus, the socially anxious adolescents’ perceptions of other people’s behavior towards them were not studied in isolation but in connection with how the other students perceived that socially anxious students in their class were treated.

A second important difference with prior research is that we focused on adolescents’ perceptions in a naturalistic situation, namely, giving an oral presentation in their own classroom. Asking about the perceptions of the responses of their classmates has the advantage of higher ecological validity. Classmates are very important persons in students’ social life and therefore students will be highly sensitive to the way they are treated by the class. Moreover, classmates have socially interacted for a rather long period. As a consequence, class behavior towards the student who is giving an oral presentation will be based not only on the students’ performance at that specific task but also on the pattern of social interactions that has developed in this classroom. This kind of situation seems more informative about students’ perception of the treatment they receive by others than an experimental situation in a laboratory.

In Dutch high schools, oral presentations in front of the classroom take place on a regular basis. Therefore, students would have sufficient experience with it to rate the behavior of their peers in this specific situation.
Prior studies have found that speaking in public is one of the most feared situations for socially anxious persons (e.g., Hofmann, Ehlers, & Roth, 1995). Moreover, the fear of public speaking increases in adolescence (Gullone & King, 1993). In a survey study, nearly 20% of the adolescents reported fear of public speaking (Hofmann et al., 1995).

The present study addressed the following three research questions. (1) Is there a difference between high and low socially anxious students in the way they feel treated by their classmates during an oral presentation? On the basis of prior studies (Norton & Hope, 2001; Spence et al., 1999) it was expected that the highly anxious students would perceive the behavior of the class during their own presentation as relatively negative. In order to place the students’ perceptions of the way they are treated in a meaningful context we also asked the following question. (2) Do socially anxious students perceive the treatment of other students in their class, low and high socially anxious ones, also as negative? Possibly, the high socially anxious students have a negatively biased perception of their peers’ behavior in all evaluative situations. (see Alden & Taylor, 2004). (3) Finally, we evaluated whether in the eyes of socially non-anxious peers and of teachers the behavior of classmates towards high socially anxious students was more negative. We therefore asked all the students and one teacher per class about the behavior of the class towards socially anxious and non-anxious students. If students and teachers would not perceive negative class behavior towards high socially anxious peers, whereas socially anxious students would perceive that they were treated in a negative way, this would suggest that the perceptions of the socially anxious students were distorted. However, if non-anxious adolescents agree with their socially anxious peers that the latter are treated more negatively by their classmates, this would support the kernel-of-truth hypothesis.

The approach to measuring the students’ perceptions of class treatment was based on prior studies regarding students’ perceptions of teacher treatment (Babad, 1990; Blöte, 1995). In these studies, good and poor students were asked how they felt treated by their teachers. For that purpose they filled in a Teacher Behavior List in three different forms, one regarding the way they themselves felt they were treated, one regarding teacher treatment of a hypothetical low achieving student, and one regarding teacher treatment of a hypothetical high achieving student. The teachers gave their own perceptions of their differential behavior towards low and high achieving students using the same lists as the students. The high achieving students agreed with their low achieving peers that the latter received more attention from the teacher but that poor achievers were also treated more negatively by the teacher.

Method

Participants

The participants were 998 students from the two levels of Dutch high school that prepare students for higher education (that is, “havo”: senior general secondary education; and “vwo”: pre-university education). The study had started with recruiting 1045 students, but 47 students either refused to participate or did not complete all four measures of the study. The participating students, 505 girls and 487 boys, were from Grades 8, 9, and 10 of two different schools. Their age ranged from 13 to 18 years, $M = 14.7$, $SD = 1.09$. The sample was predominantly White and from middle class families. In total, we collected data from 48 classes. The students in these classes did not take all their lessons together. Dependent on the learning trajectory they had chosen the group of students would split up for certain lessons. However, they were together for a number of obligatory lessons among which the Dutch and English language lessons where oral presentations were practiced.

Three anxiety groups were composed on the basis of students’ total score on the Social Anxiety Scale for Adolescents (SAS-A; see Measures). One group comprised of socially high-anxious students ($n = 131$, 89 girls and 42 boys) with a SAS-A score $\geq M + 1$ SD. A second group consisted of socially low-anxious students ($n = 165$, 57 girls and 108 boys) with a score $\leq M - 1$ SD. The third group comprised of students with an average score, the middle anxious group ($n = 702$, 360 girls and 337 boys).

For each class, a teacher that knew the class well during oral presentations was asked to participate in the study. In total, data from 42 teachers were collected. The other six did not return their forms.
Measures

Social Anxiety Scale for Adolescents (SAS-A)

The Dutch translation of the SAS-A (La Greca & Lopez, 1998) was used to measure the participants’ social anxiety. The SAS-A contains 22 items, 18 self-descriptive statements and 4 filler items. Each item is rated on a 5-point scale according to how often the item is valid for the person ranging from 1 (not at all) to 5 (always). The internal consistency of the scale is satisfactory (La Greca & Lopez, 1998; Myers, Stein, & Aarons, 2002). In our sample, Cronbach’s \( \alpha \) for the total scale was 0.91.

Perception of treatment lists

Three lists were developed for measuring students’ perceptions of behavior of classmates towards students who give an oral presentation. The first list assesses the perceived behavior of the class towards the student him- or herself (the self-list); the second list assesses the perceived behavior of the class towards a hypothetical student who is socially Low Anxious (the LA-list); and the third list assesses the perceived behavior of the class towards a hypothetical student who is socially High Anxious (the HA-list). The three lists each contain the same 24 items that are phrased a little differently according to the object in the list. For example, Item 1 “The class listens attentively while you are speaking”; “The class listens attentively while A (or B) is speaking”. Each list refers to 12 different class behaviors once stated in a negative way and once in a positive way. The items each describe a specific behavior of the class directed to the speaker like paying attention to what is said by the speaker, ridiculing the speaker, asking questions, and showing empathy. The behaviors are concerned with the starting period of the speech (e.g., Item 2 “As you walk to the front of the classroom to give your presentation, the class has already settled down to listen”, the time the speech is being held (e.g., the above mentioned Item 1), and the period right after the speech (e.g., Item 17 “Your classmates pose serious questions at the end of your presentation”). The items are rated on a 7-point scale ranging from 1 (true) to 7 (not true).

The following written instruction was given with the self-list: “Imagine you are giving an oral presentation in front of the class. How is the class reacting to your presentation?” The introduction of the LA-list reads: “Imagine student A. It is A’s turn to give an oral presentation in front of your class. A is a person who does not mind to give a talk for a group of people. Therefore, A does not worry about doing this presentation; in fact A likes to do it. A is socially an easy-going person, relaxed in his/her behavior. Image how the class is reacting when A gives a presentation.” The following introduction is given with the HA-list: “Imagine student B. It is B’s turn to give an oral presentation in front of your class. B is a person who is scared by the idea of doing a presentation for a group of people. B is a person who is also afraid to meet new people or to walk through a crowd when attending a party. B’s behavior is socially a bit awkward. Image how the class is reacting when B gives a presentation.”

Procedure

The students filled in the SAS-A and the three perception lists in their classroom. A teacher and an experimenter (a graduate student) were present. The experimenter explained the purpose of the study in terms of the experiences people have when giving an oral presentation. The students were told that participation in the study was voluntary and that their responses to the lists were anonymous. They then filled in the SAS-A, the self-, LA-, and HA-lists, respectively. The teacher who was present in the classroom also filled in the LA and HA-lists for the class. The whole procedure took less than 40 min.

1Copies of the 3 perception lists are available on request from the first author.

2The students filled out the self-, LA, and HA-lists in a fixed order. List and order effects were therefore confounded. In another study (in preparation), using 220 high school students the effect of order was controlled for. The results then showed that order of presentation did not have any significant main or interaction effect on the three lists.
Data analysis

Student variables

Social anxiety was a between subjects variable with three categories, namely, high, middle, and low. First, a MANOVA was conducted with repeated measures for list (self-, LA-, HA-) and with class (1–48) and gender as between variables. With this MANOVA it was tested if (a) differences existed in the total sample between perceived class behavior towards students themselves, towards the low and towards the high socially anxious student and (b) if these differences were related to class or gender. In three subsequent ANOVAs, one for each list, we tested for the effect of social anxiety on the perception of the students. In these analyses we also included class and gender; gender was entered as a between-subjects variable and class as a random factor. We chose to enter class as a random factor because we were not interested in differences between classes in the present study, but did want to control for the effect of class.

Teacher and class variables

The perceptions the teachers had of the behavior of their classes towards low and high socially anxious students were compared with those of their students. For this purpose, mean student scores per class were computed for the LA- and HA-lists, respectively, and differences between these means and the scores of the teachers were tested with \( t \)-tests. We also calculated the correlation between the scores of teachers and classes on the two lists.

Results

Preliminary analyses

Descriptive statistics of the SAS-A yielded a mean sum score of \( M = 37.77, SD = 10.44 \). An ANOVA was conducted to test for gender and age effects on the SAS-A score. The effect for gender was small but significant, \( F(1,981) = 32.89, p < 0.001 \), partial \( \eta^2 = 0.03 \). The girls had a higher score on the SAS-A than the boys, with M’s of 40.06 and 35.42, respectively. This gender effect was not unexpected. Prior research also indicated that girls report a higher level of social anxiety than boys (La Greca & Lopez, 1998). The age effect, \( F(5,981) = 0.79 \), and the Age \( \times \) Gender interaction effect, \( F(4,981) = 1.08 \), were not significant.

Three Principal Components Analyses were performed on the items of the self-list, the LA-list, and the HA-list, respectively. In all three analyses a relatively large first eigenvalue came out, of 7.92, 9.32, and 11.77, respectively. The second eigenvalues were \( < 1.85 \) for all three lists. On the basis of the scree-plots—and consistent with the design of the lists, we concluded that a one-factor solution described the data best. This first factor explained 33\%, 39\%, and 49\% of the variance of the respective lists. The three lists had good internal consistency, Cronbach’s \( \alpha \)'s of 0.91, 0.93, and 0.95, respectively. In the following analyses the mean score over all 24 items was used for each list (the 12 negatively phrased items were recoded). Thus, scores had a minimum of 1 and a maximum of 7, with higher scores indicating more negative perceptions of class behavior.

A MANOVA with repeated measures was performed to test for differences in the total sample between the scores of the three lists (within variable) and for the effects of class (48) and gender (2) on the lists. The list effect was significant, \( F(2,896) = 328.25, p < 0.001 \), partial \( \eta^2 = 0.42 \). Pair-wise comparisons showed that each list differed from the other two lists \( (p's < 0.01) \). The students felt that high socially anxious peers were treated in a more negative way than low socially anxious peers (see Table 1). They also perceived that they themselves were treated more positively than high socially anxious students but less positively than low socially anxious students. Furthermore, classes differed in their perception of the behavior of their classmates, \( F(47,897) = 6.43, p < 0.001 \), partial \( \eta^2 = 0.25 \); and boys and girls also had different perceptions, \( F(1,897) = 24.21, p < 0.001 \), partial \( \eta^2 = 0.03 \), \( M_{boys} = 2.69 \), and \( M_{girls} = 2.44 \). Boys were a little more negative about class behavior than girls. The List \( \times \) Gender interaction was also significant, \( F(2,896) = 7.44, p < 0.01 \), partial \( \eta^2 = 0.02 \). This interaction effect will be made clear in the following analyses on each of the three individual lists.
Relation between social anxiety and perception

Treatment of the students themselves

An ANOVA was performed on the scores of the Self-list with anxiety (high, middle, and low anxiety) and gender as between variables, and class as random factor. The effect of anxiety was significant, $F(2, 126.31) = 22.39, p < 0.001$, partial $\eta^2 = 0.26$. Table 1 shows that especially the high socially anxious students felt they were treated in a negative way. Bonferroni post-hoc tests indicated that the differences between the low socially anxious group on the one hand and the other two groups on the other hand were significant ($p$'s < 0.001). The difference between the middle and low socially anxious groups was not significant. Furthermore, the gender effect was significant, $F(1, 119.85) = 11.86, p < 0.001$, partial $\eta^2 = 0.09$. Boys were more negative in their perceptions of the way they were treated than girls. The Anxiety $\times$ Gender interaction was not significant indicating that the difference between the perceptions of the three anxiety groups was not influenced by gender. In conclusion, the high socially anxious students reported that they are more negatively treated than their non-anxious classmates.

Treatment of high socially anxious peers

With respect to the perception of behavior of classmates towards high socially anxious students (HA-list) none of the main or interaction effects was significant (see Table 1). This shows that anxiety level and gender of the participants did not make a difference as far as the perception of class behavior towards anxious students was concerned. In combination with the results of the above-mentioned MANOVA (see Preliminary analyses) this indicates that high, middle and high socially anxious students agreed that a socially high anxious peer was treated negatively.

Treatment of low socially anxious peers

The perception of behavior of classmates towards low socially anxious students (LA-list) differed between the three anxiety-groups, $F(2, 136.73) = 7.23, p < 0.001$, partial $\eta^2 = 0.10$. However, post-hoc Bonferroni tests did not yield significant differences between the pairs of groups (see Table 1). Thus, although a relation was found between social anxiety and perception of peer behavior, the difference between the three anxiety groups was too small to reach significance. The gender effect was again significant, $F(2, 47.46) = 22.66, p < 0.001$, partial $\eta^2 = 0.13$. The boys were more negative in their perception of class behavior than the girls. The Anxiety $\times$ Gender interaction was not significant.

Teacher validation

To validate the above-mentioned results that were based on the perceptions of the students, we compared the perceptions of the students with those of their teachers. The correlation between the perceptions of teachers and their classes for the two lists was significant: $r = 0.30$ ($p < 0.05$) for the LA-list; and $r = 0.28$ ($p < 0.05$) for the HA-list. Furthermore, the means on the LA-list of teachers and their classes did not significantly differ, $t(41) = 0.56$, n.s. (see Table 1). Thus, teachers and classes agreed on the behavior of the

<table>
<thead>
<tr>
<th></th>
<th>Self-list</th>
<th>LA-list</th>
<th>HA-list</th>
</tr>
</thead>
<tbody>
<tr>
<td>All students</td>
<td>2.34 (0.93)</td>
<td>1.98 (0.99)</td>
<td>3.32 (1.29)</td>
</tr>
<tr>
<td>Boys</td>
<td>2.42 (0.91)</td>
<td>2.17 (0.99)</td>
<td>3.46 (1.17)</td>
</tr>
<tr>
<td>Girls</td>
<td>2.25 (0.94)</td>
<td>1.79 (0.95)</td>
<td>3.18 (1.40)</td>
</tr>
<tr>
<td>Low anxious group</td>
<td>2.16 (1.03)</td>
<td>1.91 (1.14)</td>
<td>3.51 (1.41)</td>
</tr>
<tr>
<td>Middle anxious group</td>
<td>2.29 (0.87)</td>
<td>1.97 (0.95)</td>
<td>3.24 (1.25)</td>
</tr>
<tr>
<td>High anxious group</td>
<td>2.82 (0.96)</td>
<td>2.12 (1.01)</td>
<td>3.49 (1.31)</td>
</tr>
<tr>
<td>Teachers</td>
<td>—</td>
<td>1.89 (0.83)</td>
<td>2.45 (0.86)</td>
</tr>
</tbody>
</table>

Table 1

M's (SDs) of perceived behavior of classmates towards the student him/herself, a low and a high socially anxious peer.
class towards a low-anxious student. In relation to high-anxious students, however, the teachers rated the behavior of the class as less negative than the students did, \( t(41) = 6.44, p < 0.001 \). This notwithstanding, we still found a significant difference between the LA and HA-lists of the teachers, \( t(41) = 4.67, p < 0.001 \). In the eyes of the teachers, like in those of their students, the high socially anxious students were treated relatively negatively.

**Discussion**

The first conclusion of the present study is that in an evaluative type of situation socially anxious students perceive they are negatively treated by their peers. This finding is important because, to our best knowledge, this is the first time that the negative perceptions of socially anxious individuals concern specific behaviors directed towards them by other persons. A second conclusion is that socially high anxious students have similar perceptions of class behavior as the other students in their class when it comes to behavior directed towards classmates. This finding presents evidence that the socially high anxious students do not have a distorted perception of the social behavior of their classmates in general. Third, the anxious students do not have a distorted perception of their own treatment either. They have a good reason to feel that they themselves are negatively treated, because it is also the perception of their peers and their teachers that class behavior towards socially anxious students is relatively negative.

The results of the present study present further evidence that the negative perceptions socially anxious individuals have of other persons’ reactions towards them (Hirsch & Clark, 2004) are not negatively biased. In line with prior lab studies (e.g., Norton & Hope, 2001) we found that socially anxious individuals have some reason for developing negative feelings in social situations. They are not wholly the result of their negative self-image (Clark & McManus, 2002) and their self-focused attention (Clark & Wells, 1995) in social situations.

The importance of the present results is that they refer to the perception of specific peer behaviors in a naturalistic setting. They present evidence “from real school life” that the negative perceptions socially anxious adolescents have of their own social performance are maintained and possibly even caused by their peers’ behavior towards them. It is plausible that their negative experiences with the way they are treated by other persons at least augment their feeling of failure in social situations. Based on these day-to-day experiences they then expect other persons to be negative about their social performance (Baldwin & Main, 2001). This might explain why in the Perowne and Mansell (2002) study the socially anxious participants interpreted the behavior of the “make believe” audience more negatively than non-anxious individuals did. Both groups talked in front of the same pre-taped audience, but the socially anxious group experienced less positive evaluation from this audience than the control group did.

The present study addressed the “missing link” between the finding (a) that socially anxious individuals have negative perceptions of their own social performance and of the way other people evaluate them, as reported in some studies, and (b) the negative behavior that people show towards socially anxious individuals in their everyday life, as reported in other studies. The present findings showed that socially anxious individuals accurately perceive the negative behavior directed to the high socially anxious. It can therefore be argued that the fear of negative evaluation found in socially anxious individuals is not unfounded, but at least partly based on accurate perceptions of differential peer treatment.

Apart from being more negatively treated by others, socially high anxious students are also to some extent stigmatized by this behavior of their classmates because other students agree on the negative treatment of the socially anxious. The fact that they are treated differently by their peers and that their peers know this, is probably more important than the exact amount of negative behavior they encounter. It is possible (the present study did not address this) that socially anxious individuals perceive more negativity in other persons’ behavior than there actually is. In our opinion, however, this is of lesser importance than the fact that they have reason to feel treated in a negative way. One should, therefore, reserve the terms “distorted perception” and “negatively biased perception” for cases where individuals perceive a negative treatment or opinion from other persons when there is actually no ground for this. Evidently, new research will be needed to investigate the effect of degree of encountered negativity on social anxiety.

Overall, teachers were in agreement with the students in their class that socially anxious students are treated more negatively than non-anxious students. It is, however, remarkable that teachers and students agreed on
the treatment of low anxious students but differed on that of high anxious students. The teachers perceived class behavior towards high socially anxious students as less negative than their class. One possible explanation for this finding is that a negative treatment of high anxious students is not something teachers will (openly) approve of and will readily admit. The teachers might therefore have sketched a relatively “rosy” picture of class behavior just like the teachers in the Babad (1990) and Blöte (1995) studies did of their own behavior.

A question that deserves attention is to what extent findings based on an oral presentation generalize to social interactions in different situations. In the introduction we argued that the behavior of classmates during an oral presentation is part of the social interaction pattern between students that over time has established itself. Other studies have already shown that socially anxious youths are victims of neglect and exclusion in interaction with peers as observed by independent observers (e.g., Gazelle & Ladd, 2003; Spence et al., 1999). Whether or not the socially anxious children and their peers are willing to admit this kind of behavior in everyday interactions remains to be seen.

A limitation of the present study is that the link between perceived and actual behavior was not directly investigated. Socially anxious students, their classmates, and their teachers all agreed that socially anxious peers were negatively treated, but the actual behavior of the class was not rated by independent observers. Moreover, the perceived behavior could not be linked to an actual high or low socially anxious peer, because the study used hypothetical students. For a better understanding of the underlying mechanisms of the negative perceptions students have, it seems important in future studies to link the perceived behavior to actual behavior.

Finally, the study used a non-clinical sample of socially anxious adolescents and therefore cannot draw firm conclusions about adolescents who seek treatment for their social anxiety. However, it does not seem likely that the results would be quite different in a clinical group of socially anxious adolescents. The fact that in the perception of students and teachers alike high socially anxious individuals are relatively negatively treated seems in itself important to a better understanding of the development of social anxiety.

Acknowledgment

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References


