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Growing up to be fearful? Social evaluative fears during adolescence

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CHAPTER 2

Social fears during adolescence: is there an increase in distress and avoidance?

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Abstract

Mid-adolescence is considered as the time of onset for social phobia and is assumed to be related to a normative increase of social fears. People diagnosed with social phobia, however, do not only experience high levels of fear or distress, but also report avoidance behavior. Little attention has been paid to the development of avoidance behavior during adolescence.

In the current study, a community sample with 9–17 year olds (N = 260) completed a questionnaire derived from the Anxiety Disorders Interview Schedule for Children (ADIS-C) [Silverman, W.K., & Albano, A. M. (1996). *Anxiety disorders interview schedule for DSM-IV child version, child interview schedule*. San Antonio: The Psychological Corporation]. They rated their levels of distress and avoidance in a variety of social situations. The results showed an age related increase for formal speaking and interaction situations in both avoidance and distress, with a stronger increase in avoidance than in distress. The same pattern was found for girls for situations regarding observation by others. No effects were observed for informal speaking and interaction situations.

Introduction

Mid-adolescence is considered as the time of onset for social phobia. Most studies report an age of onset for this disorder of 10 years or older (Rapee &

Spence, 2004). Prevalence rates of social phobia during adolescence exceed those during childhood and continue to increase throughout adolescence. Essau, Conradt, and Petermann (1999) conducted an epidemiological study among 1035 adolescents from a community sample and found the diagnosis of social phobia to increase from 0.5% for 12–13 year olds to 2% among 14–17 year olds. Wittchen, Stein, and Kessler (1999) showed that this increase continued into late adolescence and young adulthood. In their sample the prevalence rate for the 14–17 year olds was 4.0%, the prevalence rate for the oldest age group, i.e. 18–24 year olds, was 8.7%.

Social phobia and social fears

Increase in the prevalence of social phobia with age has been ascribed to an increase in social fears during adolescence. However, this assumption has not always been supported by studies on social fear (e.g. Gullone, King, & Ollendick, 2001; Gullone & Lane, 2002). Although some studies report an increase during adolescence (e.g., Weems & Costa, 2005; Westenberg, Drewes, Goedhart, Siebelink, & Treffers, 2004), other studies report that levels of social fear are stable (e.g., Gullone et al., 2001) or even diminish during this time period (e.g., Gullone & Lane, 2002).

Previous research has demonstrated that use of subtypes can be very enlightening when studying developmental pathways. Within social fears it has been possible to distinguish different clusters or subtypes of fears which show different age patterns. It appears that while fears for certain social situations do not change over the course of development, other social fears do show an increase with age. Westenberg et al. (2004), for example, studied three subtypes of fears within the Fear of Failure and Criticism scale of the Fear Survey Schedule for Children- Revised (FSSC-R; Ollendick, 1983). They observed an increase for items with a clear social evaluative component (i.e. Fear of Social evaluation and Fear of Achievement evaluation), whereas a decrease was found for Fear of Punishment where the social evaluative component is less strong. When these items were combined in the total Failure and Criticism scale, no age differences were found. This finding demonstrates that the study of specific subtypes of social fears separately might better the understanding of the development of social phobia.

Social phobia and avoidance

People diagnosed with social phobia do not only experience high levels of distress, but also report avoidance behavior. Avoidance has been mentioned as a factor that contributes to a worsening of the disorder (Chartier, Hazen, & Stein, 1998), to the maintenance of anxiety disorders (Muris, 2006) and is a crucial element of a social phobia diagnosis, see DSM IV-TR (American Psychiatric Association, 2000). Hence, increase of social phobia diagnoses during adolescence might be related to increasing levels of distress, but also to a general increase in avoidance behavior.

Rapee and Spence (2004) propose that it is exactly this behavioral part, i.e. avoidance, that changes most during adolescence, rather than a further increase in distress. They argue that “the apparent onset of social phobia during early adolescence may perhaps have more to do with the increase in life interference caused by social anxiety at this developmental stage than with an increase in actual levels of social distress” (Rapee & Spence, 2004, p. 741). This suggests that inclination to avoid social situations that are experienced as stressful, increases more with age than the level of distress. In a clinical sample preliminary evidence has been provided for this increase in avoidance with increasing age. Rao et al. (2007) found that children and adolescents diagnosed with social anxiety disorder (SAD) differed in how they rated their level of avoidance. From the diagnostic interview it emerged that socially anxious adolescents were more eager to avoid social situations than their younger counterparts. Some examples of the situations are “musical or athletic performance” and “speaking to adults.” In addition, they reported more distress in these situations compared to children, and in half of the situations there were more adolescents than children who reported moderate to severe levels of distress. This study shows that at least for a clinical population it appears that with age both levels of avoidance and levels of distress increase. It is unclear whether this also happens within a non-clinical sample.

The exact characteristic of the relationship between avoidance and anxiety has received limited attention (Heimberg, 2003). One reason for this might be that in clinical populations anxiety and avoidance are often difficult to distinguish, because at a clinical level avoidance and anxiety will most often be

highly correlated. For example, Heimberg et al. (1999) report a correlation of .91 between avoidance and anxiety in their clinical sample. To study the relationship between the two, it seems necessary to include non-clinical participants as well, where the range in avoidance and distress might be much larger.

There is some evidence that avoidance is related to non-clinical levels of social fear. Essau et al. (1999) found that the majority of the 12–17 year old adolescents in their community study who reported some social fears also indicated avoidance of the accompanying social situations. Although this study showed that social fears and avoidance are related, they did not investigate whether age related changes in avoidance could be observed in their sample. In conclusion, although avoidance is recognized as an important element of social anxiety disorder and social fears in general, little information is available on the age pattern of avoidance.

Current study

In summary, to better understand the increase in prevalence of social anxiety disorder during adolescence, it seems important to investigate the age pattern of distress and avoidance in an adolescent community sample with a broad age range. The study focuses on three main issues.

(1) *Age differences in reported distress and avoidance.* On the basis of previous findings (Westenberg et al., 2004) we expect that for some situations (i.e. highly evaluative situations) distress will show a clear increase, but not for social fears in general. For this reason the age patterns will be studied for three different social domains, which vary in the centrality of the social evaluative component. The three domains that will be investigated are based on Hofmann et al.'s (1999) categories and include: (1) formal speaking and interaction, (2) informal speaking and interaction, and (3) observation by others. The use of these three subtypes has been validated in a recent study by Cox, Clara, Sareen, and Stein (2008). Their two nationally representative mental health surveys revealed the three factor solution for social situational domains as described above. The 'formal speaking and interaction' category seems to have the strongest social evaluative part. Therefore, one would expect age differences in distress to be most pronounced for this category. Whereas age differences in distress are mainly expected to occur in formal social situations, age

differences in avoidance are expected for all social situation with the strongest increase for formal situations (Rapee & Spence, 2004).

(2) *Comparisons between distress and avoidance within each age group.* Furthermore, we will test the hypothesis proposed by Rapee and Spence (2004) that the inclination to avoid will show a steeper increase than reported levels of distress during adolescence. These divergent age patterns might result in an increasing discrepancy between reported levels of avoidance and distress for each of the three domains. Because younger children might not have the opportunity to avoid, due to strict parental guidance, the willingness to avoid might already be present. Thus the children are instructed that in the current study avoidance also reflects their willingness to avoid. The willingness to avoid might actually be crucial in the final step from fear to phobia and might be viewed as a risk factor for developing social anxiety disorder.

(3) *Salience of formal fears in different age groups.* Finally, to investigate whether formal social (evaluative) fears do not merely show an increase with age, but also become more salient than the other fears, the relative importance of social fears within each age group will be tested. It is expected that within the youngest age group the reported levels of distress and avoidance for the different social situations are comparable. In contrast, the older children are expected to report more distress and avoidance for formal situations than informal or observation situations.

Method

Participants

Data used in this study are part of the Social Anxiety and Normal Development (SAND) study, which is a larger study approved by the Medical Ethical Committee of Leiden University, the Netherlands. In the present study a local primary and secondary school participated. The current sample consisted of 126 girls (48.5%) and 134 boys (51.5%). Participants were between 9 and 17 years of age, with a mean age of 13.53 ($SD = 2.17$). Participants were assigned to one of three age groups in the analyses that follow, i.e., 9–11 years (children, $n = 71$ including 33 girls), 12–14 (early adolescents, $n = 112$ including 53 girls), and 15–17 (mid adolescents, $n = 77$ including 40 girls).

Measure

ADIS-C SITUATIONS: DISTRESS AND AVOIDANCE

Participants were administered a short questionnaire based on social situations that are part of the social phobia module from the Anxiety Disorders Interview Schedule for Children (ADIS-C; Silverman & Albano, 1996). In the current study it was not possible to administer the complete ADIS-C. Following the ADIS-C social phobia module children are presented with 20 situations and asked whether they would feel distressed in this situation and whether they try or would like to avoid the situation. The ADIS-C is widely used and its social situations compare well with Hofmann et al.'s model (1999). One item from the original list was replaced. The item "reading aloud in front of your class" replaced the item "dating." This was done for two reasons: (1) dating was deemed less relevant for the younger participants, and (2) our specific interest in performance situations.

Although the ADIS-C is normally administered by a clinician, in the current project the situations were presented in questionnaire format, either by PC or paper-pencil. The participant first rated every situation for distress, indicating on a nine point thermometer scale how they would feel in the situation (1 = I feel fine, 9 = I feel extremely distressed). The same situations were also rated by the participant for avoidance. They were asked if they would avoid this situation or if that was not possible how much they would like to avoid the situation if they could (1 = I never try to avoid this situation, 9 = I always try to avoid this situation). The reliability for the distress-scale was $\alpha = .86$ (for the three age groups reliability ranged between .80 and .89) and for avoidance $\alpha = .81$ (for the three age groups reliability ranged between .81 and .83).

Primary school children were given more detailed instructions to make sure they understood the meaning of avoidance and distress, because in Dutch these words might be difficult for some of the younger participants. A short standard explanation and examples were given. The children were explained that they might experience some situations as more pleasant than others. When a situation is unpleasant it might cause feelings of distress which means you might not feel well or feel a little upset. They were also told that some children would avoid or want to avoid certain situations. In this case they would try not to be in the situation in different ways. Their understanding was checked by

the experimenter before the child rated the different situations.

In the current study the situations were divided in three categories, which are based on the study by Hofmann et al. (1999). The three categories are (1) formal speaking or interactions which included answering and asking questions in class, giving a speech, and reading aloud, (2) informal speaking or interactions which involved talking to people in person or over the phone, inviting children to do something together and attending parties, and (3) observation by others which included having your picture taken, using a public bathroom, eating in front of others or performing in front of others (either a play, sports, or writing on a chalkboard). The assignment of the items to the three categories was done by two researchers independently. The researchers agreed on the majority of the situations and assigned them to the same categories. Three situations could not be unanimously assigned to one of the three categories. These situations were “taking a test,” “playing/working with a group of children,” and “attending meetings.” Note that these situations were included in the overall scale.

Apart from one, internal consistency of the items of each domain was adequate to good for both distress and avoidance. For Distress the Cronbach's alpha was .65 for formal speaking/interaction, .75 for informal speaking/interaction, and .68 for observation by others. For Avoidance the Cronbach's alpha was .70 for formal speaking/interactions, .71 for informal speaking/interactions, and .55 for observation by others. The Cronbach's alphas of the subscales differed slightly between the three age groups and became better with increasing age. There was almost no difference between the Cronbach's alpha for distress and avoidance. The range of the alpha's for the 9 to 11 year olds was .37-.74, for the 12 to 14 year olds .50-.74, and for the oldest age group .56-.78.

Procedure

Data presented in this study were collected as part of a larger study. For all children and adolescents active consent was obtained from the parents. The children were invited to come to the university. Participants were seated in separate cubicles to ensure privacy during the completion of the questionnaires. The ADIS-C was administered by computer to the secondary school children, while the primary school children completed a paper pencil version of the questionnaire.

Results

ADIS-C: correlations between distress and avoidance

Correlations were computed between the overall scores of distress and avoidance and the different social domains. Correlations for the whole sample varied between .61 and .83 (see Table 1). Strength of the correlations did not vary significantly between the age groups or sub types. Fisher-z (transformation) tests were used to compare correlations and no differences were observed.

Table 1. Correlations Between Distress and Avoidance Across Different Social Domains for the Whole Sample and Three Different Age Groups

| | Overall scale | Formal speaking/ interactions | Informal speaking/ interactions | Observation by others |
|--------------|---------------|----------------------------------|------------------------------------|--------------------------|
| 9-11 years | .68 | .61 | .72 | .63 |
| 12-14 years | .79 | .70 | .83 | .80 |
| 15-17 years | .76 | .66 | .83 | .77 |
| Whole sample | .76 | .68 | .81 | .76 |

ADIS-C: age differences in distress and avoidance for the overall social situations

To test whether the age pattern of avoidance and distress differed, three-way Mixed-Model Analyses were performed for the overall scores and the social domains separately. Although all analyses were conducted with the between-subjects age and gender, gender will only be discussed if significant age by gender interactions were observed at the .05 level of significance. The constructs distress and avoidance were included as within-subjects variables.

For the overall scores the construct by age group interaction was significant (Greenhouse Geisser $F(2, 254) = 4.11, p < .02$), confirming that the age pattern for avoidance differs from the age pattern for distress (See Fig. 1, graph 1). To understand how patterns of distress and avoidance differ from each other, follow-up paired sample *t*-tests were conducted. The difference between the

level of reported distress and avoidance was not significant for the youngest age group ($t(70) = 1.44$, *ns*), whereas the two oldest age groups reported more avoidance than distress (i.e., age group 2, $t(111) = 4.05$, $p < .01$ and age group 3, $t(76) = 4.75$, $p < .01$). Finally, the two age patterns were studied independently with ANOVAs. Age differences were found for avoidance ($F(2, 257) = 4.58$, $p < .05$), but not for distress ($F(2, 257) = 1.74$, *ns*) when looking at the overall reported levels of distress and avoidance. The two oldest age groups reported more avoidance than the 9–11 year olds (p values $< .05$, Bonferroni).

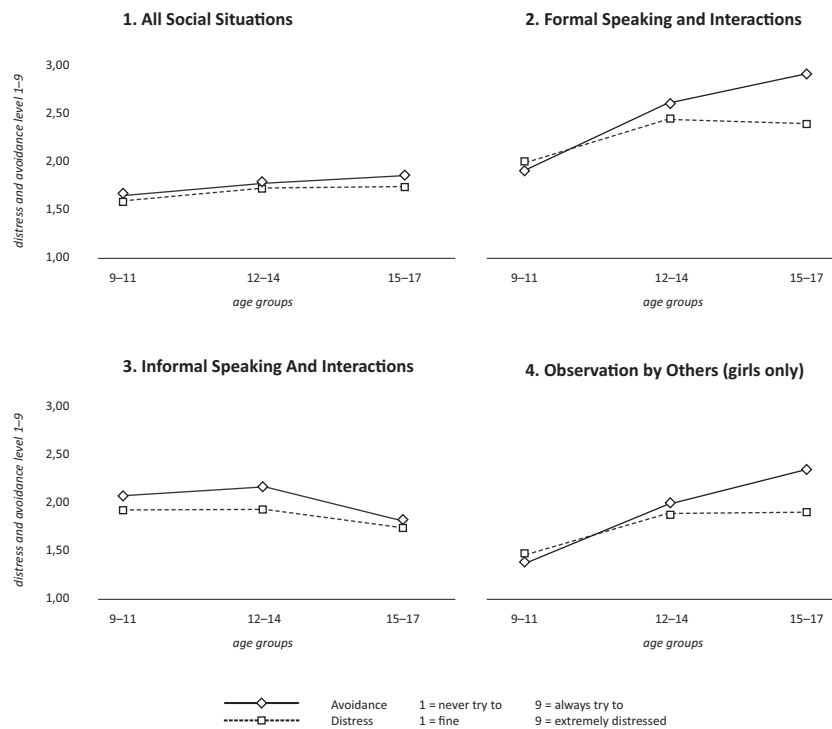


Fig. 1. Mean level of reported distress and avoidance for social situations in general and specific social domains.

ADIS-C: Age differences in distress and avoidance for specific social domains

Formal speaking and interaction: For 'formal speaking/interaction' a construct by age effect was observed (Greenhouse Geisser $F(2, 254) = 4.55, p < .01$; see Figure 1, graph 2). Hence, the age patterns for distress and avoidance concerning formal speaking and interaction situations differ. To interpret the construct by age interaction, paired-sample t-tests were conducted. These tests showed that a difference between distress and avoidance was not present in the youngest age group, but was present in the 12–14 year olds ($t(111) = -3.13, p < .01$) and 15–17 year olds ($t(76) = -4.87, p < .01$) with higher levels of avoidance than distress.

Furthermore, the age patterns for distress and avoidance were studied separately with ANOVAs. The age effect in reported levels of distress concerning formal speaking/ interaction situations was significant ($F(2, 254) = 3.88, p < .05$, partial $\eta^2 = .03$). As expected post hoc analyses (Bonferroni) showed that the 9–11 year olds reported less distress in formal speaking/interaction situations than the older children. However, the difference with the oldest group was at a trend level, $p < .10$. An age effect was also observed for reported levels of avoidance ($F(2, 254) = 12.34, p < .001$, partial $\eta^2 = .09$). The 9–11 year olds reported less avoidance compared to the adolescents from the two oldest age groups (p 's $< .01$, Bonferroni). In sum, these results showed that both avoidance and distress for formal speaking/interaction increased with age, and that the increase for avoidance is steeper as shown by the significant interaction effect.

Informal speaking and interaction: For the domain of 'informal speaking/interaction' none of the effects tested by the three-way Mixed Model Analysis were significant (see Figure 1, graph 3). It can be concluded that the age pattern for distress and avoidance concerning this type of situation did not differ. The follow-up ANOVAs showed that the age effect for both distress ($F(2, 254) = 1.09, ns$) and avoidance ($F(2, 254) = 2.66, ns$) were not significant. Hence, the level of reported distress and avoidance concerning informal speaking and interaction situations did not differ between the three age groups.

Observation by others: For the domain 'observation by others', the three-way Mixed Model Analysis with age and gender as between-subjects variables, and distress and avoidance as within-subjects variables showed that the three-way interaction was significant (Greenhouse Geisser $F(2, 254) = 4.264, p < .05$). As a follow-up, age by construct interactions were tested for boys and

girls separately. No age by construct interaction effect was found in the male sample (Greenhouse Geisser $F(2, 131) = .24, ns$), while among the girls the age by construct effect was significant (Greenhouse Geisser $F(2, 123) = 9.74, p < .01$). For boys the pattern of distress was similar to that of avoidance, while a difference between the two constructs emerged for girls. Hence, the difference between reported levels of distress and avoidance was only tested for girls (see Figure 1, graph 4). To study how the age pattern for distress and avoidance differed from each other among the girls paired sample t-tests were performed. These tests showed that the girls reported significantly more avoidance than distress in the 12–14 year old age group ($t(52) = -2.22, p < .05$) and the oldest age group ($t(39) = -4.65, p < .01$), whereas in the youngest age group the levels of distress and avoidance were not significantly different.

Finally, the age patterns for distress and avoidance were studied separately. The ANOVA conducted for distress showed no significant age by gender interaction effect. The main effect for age was significant ($F(2, 254) = 3.16, p < .05$, partial $\eta^2 = .02$). Post hoc analyses showed that the youngest group differed from the older children at a trend level ($p < .10$). The youngest group reported less distress in ‘observation by others’ situations.

An ANOVA conducted for avoidance showed that the age by gender interaction was significant ($F(2, 254) = 4.91, p < .01$, partial $\eta^2 = .04$). Follow-up analyses showed that the age differences were present for girls, but not for the boys. For girls, all age groups differed significantly from each other (p 's $< .05$), with the older girls reporting more avoidance of observation by others. Thus, for girls the age pattern observed for avoidance of observation situations was similar to the age pattern found for formal situations (i.e. more avoidance with increasing age), whereas for boys these situations were more like informal situations.

ADIS-C: ranking of social situations based on distress and avoidance

To determine the relative importance of the three social fear domains across age groups, paired samples t-tests were conducted with the three subscales for each age group separately. As expected the formal situations became more salient with increasing age. In the youngest age group distress and avoidance scores for formal ($t(70) = 5.01, p < .001$; $t(70) = 3.14, p < .01$) and informal social

situations ($t(70) = 4.81, p < .001$; $t(70) = 5.80, p < .001$) were higher than those for observation studies. There was no difference between the formal and informal situations in distress, a trend effect was observed for the avoidance scores ($t(70) = -1.84, p = .07$) with more avoidance reported for the informal than formal situations.

In contrast, for the two oldest age groups reported distress and avoidance experienced in formal situations was higher than both informal (age group 2: $t(111) = 5.63, p < .001$ and $t(111) = 3.37, p < .01$; age group 3: $t(76) = 5.72, p < .001$ and $t(76) = 6.48, p < .001$) and observation situations (age group 2: $t(111) = 6.57, p < .001$ and $t(111) = 6.56, p < .001$; age group 3: $t(76) = 4.77, p < .001$ and $t(76) = 5.53, p < .001$). There was no difference in reported distress between informal and observation situations. Notably, there were opposite age differences in reported avoidance. The 12–14 year olds reported more avoidance for observation than informal situations ($t(111) = 3.36, p < .01$), whereas the oldest age group reported more avoidance for the observation situations ($t(76) = -2.49, p < .05$).

To explore which specific situation elicited the most distress and avoidance, we investigated age differences in the ranking of individual items. The highest mean level of distress was reported for talking to unknown people by the youngest age group, and giving a speech in class by the second and third age group. Talking to unknown people was also the situation the youngest group and the 12 to 14 year olds would like to avoid the most, whereas the oldest age group would most like to avoid giving a speech in class.

Discussion

The current study investigated the relationship between distress and avoidance in relation to social situations and the age patterns among children aged 9–17. For this purpose a community sample of children and adolescents rather than a clinical sample was selected. Because in a clinical sample distress and avoidance are intrinsically highly correlated, it was deemed necessary to study distress and avoidance separately among a community sample. In addition, a distinction was made between specific situations in which social anxiety can occur. This was done to reveal possible diverging developmental patterns for

different social domains, which might not be visible when studying the overall scores which reflect social anxiety in general.

As suggested by the findings of Essau et al. (1999), the current study provides further evidence that avoidance and distress are also related in non-clinical samples. The correlations in the current study were strong (ranging from .61 to .83), but less strong than in the clinical sample tested by Heimberg et al. (1999) ($r = .91$). The relationship between avoidance and distress was similar for the three specific social domains and the three age groups.

No age differences were found for the overall level of distress, i.e. reported levels of fear concerning social situations in general remained stable over time. This finding mirrors the results of studies that have used questionnaires to study the development of social anxiety (e.g., Gullone et al., 2001). However, for overall avoidance significant age differences were found, with the older adolescents reporting to be more willing to avoid social situations. This finding is in line with the suggestion put forward by Rapee and Spence (2004) that over time the inclination to avoid distressing social situations increases, while distress would remain quite stable.

We hypothesized that contrasting developmental patterns might mask an increase in distress concerning some social situations. Hence, although the overall distress score did not reveal age related changes, it was expected that analyses of the three social domains separately would reveal different results. When the three domains were studied, different developmental patterns were observed, confirming our hypothesis. For some domains age differences were found for distress and avoidance, but not for all social domains. As expected, in those situations where social evaluation was present age differences were observed. No age differences were found in the reported levels of distress or avoidance of informal speaking and interaction situations.

Notably for the formal speaking and interaction situations age differences were found for both distress and avoidance. In comparison to the youngest age group, the two older groups were more fearful of formal speaking/interaction situations and they indicated a stronger willingness to avoid the situations. Although both distress and avoidance increased for these situations, it is important to note that the increase for avoidance was steeper compared to

distress. It seems that while distress mainly increases during early adolescence, avoidance seems to continue to increase throughout adolescence. Future studies might include late adolescents and young adults to investigate whether these trends continue. Furthermore, the current study reported on cross-sectional data only, which limits the possibility to test steepness. The difference in steepness and developmental change of avoidance and distress can be best tested in a longitudinal study.

Notably, in addition to the fact that the older age groups reported more distress in the formal speaking and interaction situations than the younger age groups, these situations also became the most important social fear. While the situation that was feared the most in the youngest age group was speaking to unknown people, the oldest age groups feared giving a speech which has a strong evaluative component.

An alternative explanation for the increase in social evaluative fears and accompanying avoidance would be that the older adolescents have had more experience with these situations and possibly encountered a greater number of negative experiences. However, the current sample included normally developing adolescents. For this group the number of positive experiences was probably not very different from the number of negative experiences. Furthermore, for most fears exposure brings about a decrease in the fear. Across development we see that children report less fear when they get older, with the exception of social fears (Weems & Costa, 2005).

For situations depicting observation by others, gender played an important role. A different developmental pattern was observed for boys and girls. There were no age differences in distress, only in avoidance. However, while the boys of the different age groups reported similar levels of avoidance, the oldest girls reported higher levels of avoidance than the youngest age group. This result concurs with the findings of research conducted in the field of the development of self-esteem. Especially during adolescence girls seem to become more concerned with their physical appearance. Harter (1993) found that while boys perceive their physical attractiveness quite positively throughout adolescence, girls rate themselves to be less attractive over the course of development (i.e., grade 4–11). Furthermore, Kling, Hyde, Showers, and Buswell (1999) state that “the perceived self-importance of appearance in determining self-esteem is higher in women” (p. 491). The domain observation by others seems to be the

type of situations that trigger concerns about physical appearance. Furthermore, Essau et al. (1999) reported that the gender difference in reported fears they found, with girls reporting more social fears, was only significant for the situation “doing something in front of other people.” This would explain why girls are more inclined to avoid this type of situation than boys and that this inclination grows stronger with increasing age. At the moment the relationship between self-esteem and avoidance of certain social situations is merely based on theory. Future studies should further investigate these possibilities by including a multi-faceted self-esteem measure in studies of social fear.

Charting the development for specific situations or domains of situations reveals divergent patterns which could help explain previous research findings, e.g., studies that report no age differences in social fears. If a researcher would include both performance and general social situations no age difference might be found, because age related increases and decreases for assorted social situations cancel each other out. In the current paper the overall finding that an increase in distress was absent masked the fact that in a specific social domain (i.e., formal speaking/interaction) an increase in reported levels of distress could be observed. Also in the study by Westenberg et al. (2004) analyses showed significant age differences for one social domain, i.e. social evaluative domain, but not for another, i.e. punishment. Furthermore, this is the case for both distress, and avoidance. Although age differences in avoidance also emerged at the overall level, the analyses of the different sub-domains provided new information. Increase in avoidance of formal situations was much stronger than for social situations in general and no age differences were found for avoidance of informal situations.

In sum, findings from the current community sample are for the most part in line with the developmental differences reported by Rao et al. (2007) in their clinical sample. In both studies adolescents reported more avoidance compared to children in many situations. In some situations adolescents also reported more distress than children, especially the social evaluative situations. Hence, from the current study it becomes clear that there is not only a difference in the clinical manifestation of symptoms between children and adolescents with social anxiety disorder as reported by Rao et al. (2007) where adolescents reported more avoidance, but that a normal developmental pattern underlies this difference.

A finding not hypothesized was the fact that the overall levels of avoidance were higher than those observed for distress, especially in the older age groups. It might be easier for adolescents to admit to some social fears when the questions are phrased more indirectly. Rather than asking adolescents how distressed they feel in social situations, questionnaires might assess whether they like this type of situation or if they would prefer to do something else. More indirect ways of assessing social fears might yield interesting results in future studies. Adolescents might be more inclined to provide answers that are less socially desirable.

Although the scores observed in the current community sample of children and adolescents might appear to be relatively low, they can still provide valuable insight. First, little is known about avoidance in community samples and no norm scores are available for both distress nor avoidance. Second, even in this limited range we found age differences which were in line with our expectations. Finally, as mentioned above although avoidance and distress were related, the participants reported more avoidance than distress and this discrepancy became larger with increasing age. These three issues seem to underline that in spite of the low scores, meaningful variation was observed. More research is necessary to investigate whether other instruments are more suitable to assess avoidance in community samples. These measures of avoidance, as was already the case in the current study, could provide the researcher with additional interesting information.

A couple of limitations of the current study warrant to be mentioned. Due to the limited evidence available for reliably measuring avoidance among community samples, it remains unclear to what extent the willingness to avoid can be compared with actual avoidance behavior. It is also unclear whether avoidance is a direct enough measure of life interference. Do adolescents only show an increase in the willingness to avoid certain situations or will they also mention that their fear interferes more with their daily functioning in general?

Finally, the change in format of the ADIS-C from an interview to a questionnaire might have had some consequences. First, not having a clinician present who can probe for further information or clarification, might have led to underreporting by the participants. Second, the relatively low reliability of

some scales in some groups needs to be looked at in future studies. Additional items should be designed to increase the number of items per scale. Notably, the Cronbach's alpha for the distress and avoidance scale were not very different. Thus, the low reliability of some scales cannot explain the diverging patterns of avoidance and distress that were obtained in the current study.

For future research, it would be interesting to investigate whether the fact that adolescents are more inclined to avoid certain social performance situations translates to stronger physiological responses during these types of situations. During adolescence there are many performance situations, for instance at school, that are difficult to avoid and they will have to endure. Does this mean that when they are placed in a performance situation, their physical "fear" responses are stronger? For this reasons it is necessary to compare children and adolescents' physiological responses in real-life situations, either in the laboratory or at schools.

From the current study it seems that an increase in self-reported avoidance is a part of normal development from childhood to adolescence, especially in performance situations of a high social evaluative nature, like formal speaking and interaction. Therefore, the rise in social phobia prevalence during adolescence should not only be ascribed to normative increases in social distress, but possibly also avoidance. This underlines the need for developmentally tailored assessment of social phobia. Future research should focus on which levels of distress and avoidance are developmentally to be expected and when these levels are actually deviating from normal development.

