Anger, shame and guilt in children with externalizing problems: An imbalance of affects?

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To link to this Article: DOI: 10.1080/17405620444000175

URL: http://dx.doi.org/10.1080/17405620444000175

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Anger, shame and guilt in children with externalizing problems: An imbalance of affects?

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In two studies, we examined the extent to which children with behaviour problems are characterized by a predominance of anger and a relative absence of the moral emotions of guilt and shame. In the first study, a community sample ($N = 48$) was used, in the second study a clinical sample ($N = 20$) was compared to a control group of non-problematic children ($N = 20$). The results of these studies partially supported the anger-dominance hypothesis. The non-clinical group reported higher frequencies of daily anger and also more anger in response to ambiguous hypothetical situations (Study 1). The clinical group also demonstrated an anger bias. However, they only did so by a more implicit procedure: they added anger elements to their free descriptions of events eliciting negative emotions like fear, sadness, jealousy and shame (Study 2). In both studies, there was a tendency for children with behaviour problems to react with less intense guilt and shame to ambiguous situations.

It is generally accepted that basic emotions such as happiness, sadness, fear and anger exercise an automatic effect on cognition and behaviour (Abe & Izard, 1999; Bradley, 2000; Forgas, 2002). Fearful people tend to see danger everywhere (Daleiden & Vasey, 1997), and angry people are more inclined to regard others as their enemies (Crick & Dodge, 1994). If people are aware of their own emotional state, they are usually able to correct these emotional biases to a certain extent by cognitive effort (Meerum Terwogt, 1986). Moral
emotions—triggered by an unwanted action tendency that people detect in themselves—can also be instrumental in eliciting this type of cognitive activity (Stegge & Ferguson, 2003). In psychopathology, however, there is a breakdown in cognitive control, and one (or a combination) of the basic emotions of anger, sadness and fear exercises a stronger and more permanent effect on people’s daily functioning (Power & Dalgleish, 1997). In addition, the dominant basic emotion(s) may be accompanied by problems with secondary emotions like guilt or shame (Malatesta & Wilson, 1988; Stegge, Meerum Terwogt & Bijstra, 1998).

In the present chapter we focus on systematic emotional biases in children with externalizing problems (i.e., children that are usually diagnosed with ADHD, ODD or CD within a clinical setting). We hypothesize that the emotion system of children with behaviour problems is characterized by a predominance of anger and a relative absence of guilt and shame (Stegge, Meerum Terwogt & Koops, 2000). In two studies we explored the validity of this hypothesis by comparing children with externalizing behaviour problems with their non-problematic peers on the following aspects:

(1) Self-reported frequencies of anger, guilt and shame in daily life.
(2) The perception of emotionally ambiguous situations, i.e., situations with a multiple emotional impact.
(3) The presence of anger elements in free descriptions of events eliciting other negative emotions.

**TWO STUDIES**

In order to answer the first two questions we will present and compare the results of two separate studies among children aged 9 to 12 with behaviour problems: one study among children from a non-clinical setting; and one in which the problematic group was recruited from the clinical setting. The third question was addressed in the second study only.

In the first study the participants were 15 behaviourally problematic children and 33 non-problematic peers, all recruited from regular elementary schools. Externalizing problems were assessed by using the Dutch translation of the Psychopathy Screening Device (PSD; Frick, McBurnett, O’Brien, & Wootton, 1994). This questionnaire is a 21-item behaviour-rating scale to be completed by teachers and designed to measure two constructs: poor impulse control and antisocial behaviour on the one hand; and callous, unemotional interpersonal style on the other. In the present study, only the first scale was used. This scale has been shown to be highly associated with traditional behavioural definitions of antisocial disorders (ODD, CD) as well as with the more frequently used externalizing problems.
scale of the CBCL (Frick et al., 1994; Christian, Frick, Hill et al., 1997). Children were classified as behaviourally problematic if they received a score of 8 or higher on the Conduct Problems scale of the PSD.

In the second study the participants were 20 children recruited from residential settings for children with severe behaviour problems, with a T score of 60 or higher on the Teachers Report Form of the Child Behaviour Checklist (CBCL-TRF; Achenbach 1991; Verhulst, Van der Ende, & Koot, 1997). These behaviourally problematic children were compared with 20 non-problematic children from a regular elementary school who received a T score below 60 on the CBCL-TRF.

SELF-REPORTED AFFECT

A questionnaire was constructed with 48 items reflecting a number of tendencies typical for eight different emotions, including items that specifically asked for a certain emotion (e.g., “I feel guilty”) as well as items concerning direct experiential or behavioural correlates of these emotions (e.g., “I feel like ruining something” as one of the typical action tendencies of anger). Subjects were asked to rate the extent to which they experience the presented feelings or action tendencies in daily life on a five-point Likert scale (ranging from “never” to “very often”). Internal consistencies of the eight emotion scales proved to be satisfactory (Cronbach’s alpha ranged from .66 to .79).

Table 1 presents the correlations between the PSD Impulsivity/Conduct Problems scale and the CBCL-TRF Externalizing Problems scale scores on the one hand and the emotion scales on the other. For reasons of clarity, we have limit our presentation of the results to the four emotion scales most pertinent to the questions above; that is, the scales on happiness, anger, shame and guilt.

In the non-clinical group of Study 1, impulsivity/conduct problems were associated with self-reported anger and the absence of happiness. Surprisingly, a positive (although non-significant) association with guilt was found. In the mixed clinical and non-clinical group of Study 2, externalizing problems correlated with self-reported guilt only, while the relations with self-reported happiness and anger were in the same direction as in Study 1 but did not reach conventional levels of statistical significance.

1In this first study, we opted for use of the PSD, because the study was part of a larger project in which, among other things, we aimed to evaluate the relationship between emotional dysregulation and psychopathy construct in children with behaviour problems. In the second study, the Impulsivity/Conduct Problems Scale of the PDS correlated .73 with the externalizing symptoms scale of the CBCL in the children from whom both measures where taken.
BIASED PERCEPTION OF AMBIGUOUS SITUATIONS

In both studies, three short scripts (125 to 150 words each) about emotionally charged situations were presented. The participants were instructed to imagine themselves in the position of the story protagonist. The themes of the scripts (e.g., having a conflict during a soccer tournament; being ridiculed by your peers over your new coat) were slightly different in the two studies, but they all concerned well-known problems for the children, and were typical for their age group. The scripts were emotionally ambivalent, in that they contained at least two obvious emotion perspectives, one of which was always anger. In the different stories, this anger perspective was then combined with other emotion perspectives. In the first situation (of both studies), a moral perspective was added, relevant to the emotions of guilt and shame. The remaining situations in Study 1 combined an obvious anger perspective with respectively a positive emotion (happiness or pride; situation 2) and other negative reactions (sadness and/or fear; situation 3). In Study 2, situations 2 and 3 both contained anger and shame as the most obvious emotion perspectives. After each story the subject’s personal reaction was registered—in Study 1 by using 10-point Likert scales for a number of emotions (including anger, shame and guilt) and in Study 2 by asking for an open response: “How would you feel?”

Table 2 summarizes the results of the first study.

The anger reaction (summated over all three situations) proved to be more prominent among the behaviourally problematic children than among their non-problematic peers. The shame and guilt reactions, expected in the first situation only, were less prominent among the behaviourally problematic children.

Table 3 summarizes the references to anger, shame and guilt, respectively, in the open answers provided in the second study.

The results from this study are only partially consistent with the results of Study 1: there is a tendency for shame and guilt to be reported less frequently in the clinical, behaviourally problematic group, but anger is also

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Happiness</th>
<th>Anger</th>
<th>Shame</th>
<th>Guilt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impulsivity/conduct</td>
<td>48</td>
<td>.27*</td>
<td>.35**</td>
<td>.11</td>
<td>.22</td>
</tr>
<tr>
<td>problems scale (PSD;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study 1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Externalizing problems</td>
<td>40</td>
<td>.17</td>
<td>.21</td>
<td></td>
<td>.31*</td>
</tr>
<tr>
<td>Scale (CBCL-TRF; Study</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05, **p < .01
mentioned somewhat less frequently in the clinical group. This unexpected finding might be partly due to the productive measurement technique used. While in Study 1 children were asked to rate the extent to which they would be angry, in Study 2 they were asked to produce these feelings themselves. As the story scripts were expected to elicit mixed emotions, including anger, it is not surprising that the control group reported feeling angry relatively frequently. What is surprising, however, is that the clinical group seemed to mention anger less frequently. It might be that these children are less able to acknowledge their negative reactions to the story events explicitly as feelings of anger. Social desirability might also play a role here. As these children are known to have problems with anger control, it might be that they are reluctant to admit that they would feel angry in the prevailing situation.

In Study 2 the participants were also asked to describe a prototypical situation in which they would feel sad, afraid, ashamed or jealous.

### TABLE 2
Ratings of the relevant emotion perspectives (Study 1)

<table>
<thead>
<tr>
<th>Emotion perspective</th>
<th>Behaviourally problematic children (n = 15)</th>
<th>Non-problematic peers (n = 33)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger (Σ situations 1–2–3)</td>
<td>21.2 ± 6.1</td>
<td>17.8 ± 6.0</td>
<td>.04</td>
</tr>
<tr>
<td>Anger (situation 1)</td>
<td>7.2 ± 2.8</td>
<td>5.2 ± 3.8</td>
<td>.02</td>
</tr>
<tr>
<td>Guilt/shame (situation 1)</td>
<td>1.2 ± 1.6</td>
<td>2.0 ± 1.8</td>
<td>.06</td>
</tr>
</tbody>
</table>

### TABLE 3
Frequencies in which a certain emotional perspective is mentioned (Study 2)

<table>
<thead>
<tr>
<th>Emotion perspective</th>
<th>Behaviourally problematic children (n = 20)</th>
<th>Non-problematic children (n = 20)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger (Σ situations 1–2–3)</td>
<td>1.7 ± 1.0</td>
<td>2.3 ± 1.0</td>
<td>.098</td>
</tr>
<tr>
<td>Shame (Σ situations 2–3)</td>
<td>0.5 ± 0.7</td>
<td>1.0 ± 1.0</td>
<td>.106</td>
</tr>
<tr>
<td>Guilt/shame (situation 1)</td>
<td>0.2 ± 0.4</td>
<td>0.5 ± 0.5</td>
<td>.059</td>
</tr>
</tbody>
</table>
respectively. The characteristics of each of these emotions are quite distinct. Sadness and fear are already well known concepts at age 4 (Barden, Zelko, Duncan, & Masters, 1980), and somewhere between the ages of 7 and 9, children can also be expected to have mastered the more complex concepts of shame and jealousy (Harris, Olthof, Meerum Terwogt, & Hardman, 1987; Ferguson, Stegge, & Damhuis, 1991). Nonetheless, in free descriptions, it is always possible to mingle these emotion-specific characteristics with anger appraisals or action tendencies. For instance, a prototypical fear description often involves the element of danger. But the participants might spontaneously add that the danger can be countered with aggression. Similarly, sadness can be described as a reaction to frustration, followed by a violent reaction. In each of the four descriptions we rated the presence (score 1) or absence (score 0) of this anger bias. Consistent with the anger dominance hypothesis, we found that the behaviourally problematic children spontaneously added these anger elements more frequently in their free descriptions than non-problematic children (see Table 4).

### DISCUSSION

The two studies presented above were conducted to explore the validity of the anger dominance hypothesis with respect to externalizing behaviour problems. According to this perspective, it was predicted that externalizing behaviour would be associated with:

1. A relatively high frequency of self-reported anger, combined with lower frequencies of guilt and shame.
2. A similar bias in the perception of emotionally ambiguous situations.
3. The appearance of spontaneous anger elements in free descriptions of events eliciting other negative emotions.

The results of these two exploratory studies only partially support the anger dominance hypothesis. Study 1 provides some support for the hypotheses

<table>
<thead>
<tr>
<th>Presence anger elements</th>
<th>Behaviourally problematic children (n = 20)</th>
<th>Non-problematic children (n = 20)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Presence anger elements</td>
<td>1.9</td>
<td>1.0</td>
</tr>
</tbody>
</table>
that externalizing behaviour is associated with a tendency to experience anger and that this anger tendency is accompanied by a lack of guilt and shame. In contrast, Study 2 did not reveal an association between externalizing behaviour and the self-reported experience of anger, but the behaviourally problematic children spontaneously added more anger elements to their free descriptions of events than non-problematic children did. Furthermore, the findings with respect to guilt were contradictory across methods (see Table 1 versus Table 2). The two observed inconsistencies with respect to anger report and guilt experiences will be addressed below.

Although behaviour problems were associated with a tendency to experience anger among non-clinical subjects (Study 1), such a relationship could not be established within the clinical group (Study 2), notwithstanding the fact that it is likely that the last group suffers from more severe conduct problems than the non-clinical group. However, it is argued that severe problems are also characterized by low awareness of one’s own emotional state (Jenkins & Oatley, 2000; Meerum Terwogt, Schene, & Koops, 1990); a phenomenon that could explain the absence of the expected relationship within the more extreme clinical group. In addition, self-report data of clinical subjects might be contaminated by a tendency to provide the “appropriate” answer. Within a residential setting, their socially inadequate responses are systematically corrected and they are told again and again how they ought to respond. Even if these interventions have not (or not yet) been successful in altering their behaviour patterns, these children might have already learned to provide the socially desirable answer. Therefore, we have to keep in mind that their self-reports do not necessarily reflect their true feelings and action tendencies. A less direct method of questioning (such as asking children to provide free descriptions of emotion-eliciting events), in which it is less self-evident that we were looking for an anger bias, probably provides a more accurate picture.

We observed a positive correlation between externalizing problems and self-reported guilt (Study 2). This unexpected association might be due to a confound with internalizing symptomatology, that has repeatedly been shown to co-exist with externalizing problems in clinical groups (e.g., Achenbach, 1991). Consistent with this explanation, the positive correlation between guilt and externalizing problems decreased from $r = .31^*$ to $r = .15$ when controlled for internalizing symptomatology, while the negative association between shame and externalizing symptomatology increased from $r = -.22$ to $r = -.31^*$ ($^*p < .05$). This finding demonstrates the importance of studying externalizing problems within a broader perspective on developmental psychopathology.

In conclusion, although the two studies presented here provide some support for the anger-dominance hypothesis, the findings tend to vary
somewhat across measurement techniques (e.g., “direct” versus “indirect” methods) and study populations (e.g., “clinical” and “non-clinical” subjects). Based upon our results, we strongly emphasize the need for research on the validity and applicability of self-report rating scales versus open-response techniques for the measurement of emotional states in children, e.g., through comparison with naturalistic and/or experimental observations of emotional behaviour.

REFERENCES


Manuscript received 21 August 2003
Revised manuscript accepted 24 May 2004