Bullying, Cheating, Deceiving: Teachers' Perception of Deceitful Situations at School

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Abstract

Two studies investigated in which situations teachers (would) investigate whether a student was lying or telling the truth and how these situations were perceived. Results of Study 1 indicate that teachers (would) interview students when it comes to use of unfair means, aggressive behavior, theft, absence without permission, bullying, and vandalism, whereat deceitful situations with rather light consequences were most frequently described. Moreover, participants perceived the frequency of occurrence of all situations as lower for themselves compared to colleagues. In both studies, the use of unfair means, absence without permission, and bullying (over a longer period) were rated as most frequently occurring in everyday school life. Further, deception detection was perceived as being mostly important in situations with severe consequences. Study 2 also demonstrates that situations with light consequences are perceived as situations where it is of relatively less importance to make accurate judgments, avoid wrongful accusation, and detect misbehavior, as compared with situations with severe consequences. Overall, teachers perceive avoiding wrong accusation as more important than detecting misbehavior. Influences of teachers' perceptions on their behavior are discussed.

Keywords: school, deception, cheating, bullying, social perception

"Bullying", calumnias, engaño: Percepción de los profesores ante situaciones engañosas en la escuela

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Resumen

Dos estudios analizan situaciones en las que profesores tratan de advertir, si un alumno ha mentido o no y como estas situaciones son percibidas. Los resultados del primer estudio, reflejan que los profesores interrogarían a los alumnos al observarse comportamientos inadecuados tales como: el robo, la ausencia sin permiso, la intimidación, o el vandalismo. Con lo que situaciones fraudulentas de menor gravedad, son descritas frecuentemente. Además, dichos integrantes del estudio, perciben la reiteración de los sucesos en menor medida que sus colegas. En ambos estudios se han advertido los siguientes hechos (durante un largo periodo de tiempo) como los más comunes en el día a día escolar: actuaciones improcedentes, ausencias escolares no justificadas y "bullying". Asimismo, se detectáron mentiras mayoritariamente en situaciones de graves consecuencias. El segundo estudio demuestra, que las situaciones con consecuencias de menor gravedad, se perciben como situaciones en las que realizar un juicio preciso, no es tan significativo como en las situaciones mas graves, pudiendo evitar así una acusación injusta. En definitiva, los profesores valoran más evitar una falsa acusación, antes que la detección del mal comportamiento. Debatimos sobre como la percepción de los profesores ante tales situaciones, puede influir en su conducta.

Palabras clave: escuela, engaño, calumnias, acoso escolar, percepción social

A long line of (social) psychological research demonstrated the importance of studying social situations from the perspective of those who are involved in the situation and investigating how they perceive, interpret, and bias it (see Aronson, Wilson, & Akert, 2008; Kassin, Fein, & Markus, 2011). In school settings, for example, it is important to explore how teachers perceive, interpret, and bias situations where students are involved to be able to understand teachers' behavior and reactions. Especially in deceitful situations where students' (mis)behavior might have severe consequences for others, like bullying, or for themselves, as cheating on a test, it is important to study the teacher's perspective and perception. The present studies take a closer look at teachers' perception of deceitful situations by using both, a qualitative and a quantitative approach. The main goal of Study 1 is to explore what kind of deceitful situations teachers have actually experienced. In Study 2, we use the qualitative results of the first study to investigate how deceitful situations are perceived.

Deceitful situations: Frequency of occurrence and consequences

Deceitful situations. We define deceitful situations as situations in schools where students misbehave in a certain way, where their misbehavior might have severe consequences for another student (like bullying), for an object (like vandalism), or for themselves (like cheating on a test), and where teachers have to take action. These entire situations share one feature: due to the possible consequences of misbehavior, students are motivated to lie to their teacher (see Vrij, 2008). Thus, in all deceitful situations the teacher is possibly confronted with lying students and, therefore, has to find out whether the student is lying or telling the truth in order to take disciplinary action. In Study 1 we asked teachers to describe situations where they had actually or would hypothetically interview a student to find out whether the student was lying or telling the truth.

Frequency of occurrence of misbehavior. According to a study of the Ministry of Interior and Criminological Research of Germany, deceitful situations in schools seem to appear quite frequently. In their study it was found that 44.8% of 44,160 students (average age 15) students have at least once been absent from school without permission, whereby

12.1% of the students were absent for 5 days or more during one school year (Baier, Pfeiffer, Simonson, & Rabold, 2009). Almost one quarter (24.2%) of the students said to have hit or kicked another student at least once within six months, 6.1% have destroyed another student's belongings, and 10.4% to 20.7% (depending on state, region, and size of the city in which they live) have bullied another student several times a month at school (Baier et al., 2009). Another quite frequently named criminal act was, with a percentage of 13.3%, having stolen something in a shop within the last 12 months (Baier et al., 2009). The use of unfair means is another quite prominent situation at school. Franklyn-Stokes and Newstead (1995) investigated the perceived seriousness of cheating and the assumed frequency of cheating behavior such as copying course work from other students or quoting from other existing texts without mentioning the source. The results indicate that both, teachers and students, perceive cheating as occurring quite often and as a serious offense. In total, the results indicate that misbehavior is quite common among students and, therefore, the chance of teachers finding themselves in deceitful situations is quite high. In order to keep up a functioning school system, the frequency of occurrence should differ between deceitful situations. Situations with more severe consequences should occur less frequently than those with rather light consequences. For example, schools where teachers have to deal with bullying and aggressive behavior everyday should be functioning less well as schools where teachers have to deal with absence without permission or cheating on a test on a daily basis (cf. Huisken, 2007).

Consequences of misbehavior. One can differentiate between rather light and more severe consequences of misbehavior. More severe consequences may follow misbehavior which directly involves other students. For example, Rigby (2003) found that being victimized by peers is significantly related to comparatively low levels of psychological well-being and social adjustment and to high levels of psychological distress and adverse physical health symptoms. The author suggests that long-term studies offer stronger support to the hypothesis that peer victimization is a significant causal factor in damages to pupils' health and well-being and that the effects can be long-lasting. Moreover, it seems that the tendency to bully others at school is a significant predictor for subsequent antisocial and violent

behavior. Rather light consequences may follow misbehavior which does not involve other students directly. For example, if it comes to cheating on a test or copying homework, it consequently becomes difficult for teachers to grade their students objectively and challenge their students appropriately. A student who deceives in a performance situation and consequently performs better than he or she actually is, can't be supported to actually increase his or her skills.

Findings on perception, interpretation, and cognitive bias

Following up the frequency of occurrence of deceitful situations, one can assume that people will more likely judge one type of deceitful situation as more frequently occurring in everyday school life than another type of situation if they had described this type of situation before a frequency judgment. This can be explained by the availability heuristic (Tversky & Kahneman, 1973), i.e., the tendency to estimate the odds that an event will occur by how easily instances of it pop to mind (Kassin et al., 2011). For example, imagine a teacher described a situation where he or she had interviewed a student and suspected the student to have used a cheat sheet during a test. As a consequence, this teacher would rate the frequency of occurrence of cheating incidents in general as higher as the general frequency of occurrence of another type of situation (e.g., a student was absent without permission). This can be explained by the fact that people make attributions and other types of social judgments by using heuristics such as the availability heuristic. Thus, by describing a cheating incident this type of situation is more cognitive available and will therefore be rated as generally more frequently occurring. Making an incident more cognitively available can also be achieved through media (e.g., Shrum & O'Guinn, 1993). For example, Shrum and O'Guinn (1993) found that television consumption (hours per week) influenced the perception of crime, i.e., the more television they watched the more they thought people would consume drugs or had alcohol dependency problems. The authors refer to this as the cultivation effect, i.e., the effect of watching television on the construction of social reality. These results can be explained by the heightened accessibility. Since bullying at work or in school has been a

prominent topic in the media during the last years (e.g., Gebauer, 2009, p. 2, and Tiefenbacher, 2008, p. 5) one could assume that bullying is perceived as quite frequently occurring.

Moreover, a wide range of studies on person perception (see Aronson et al., 2008; Kassin et al., 2011) indicate that people expect bad things to happen more likely to others than to oneself. For example, according to the belief in a just world (Lerner, 1980) people assume that bad things happen to bad people while good things happen to good people. Moreover, people are motivated to see themselves in a positive light, i.e., perceive themselves as a good person who does good things (e.g., Aronson, 1998). To maintain this positive self-perception, people engage in self-serving attributions, i.e., people attribute success to their personality or internal reasons and failure to external, situational factors (e.g., McAllister, 1996). Research on self-serving attributions (e.g., McAllister, 1996) indicates that students as well as teachers make self-serving biases in classrooms and take credit for success but not for failure. Moreover, the concept of implicit egoism, which is considered as an unconscious form of self-enhancement, states that people hold themselves in high regard, for example, exaggerate their control over life events, and overestimate their intellectual and social abilities (see Kassin et al., 2011, for more details). Thus, one could assume that people think that good things will happen to themselves and bad things rather to others.

Research findings in the field of social cognition (e.g., Kunda, 1990, 1999) and social information processing (e.g., Chaiken & Trope, 1999) indicate that perception and interpretation of social situations are often biased. Kunda (1990, 1999) states that social judgments can be influenced either by accuracy goals or directional goals. While an accuracy goal enhances the use of information that is considered to be the most appropriate, a directional goal motivates individuals to reach a desired conclusion and, therefore, leads to the use of information that is considered most likely to yield a desired judgment. These assumptions are in line with the Heuristic-Systematic Model (HSM) of social information processing (Chen & Chaiken, 1999). In the HSM, different kinds of motivation are described that are assumed to influence social judgments: accuracy, defense, and impression motivation. While

accuracy-motivated perceivers are assumed to process judgment-relevant information relatively open-mindedly and even-handedly, defense and impression motivated perceivers are hypothesized to process this kind of information in a rather biased manner. The problem with biased information processing lies in the consequences for behavior. According to Ajzen (1985), behavior depends on behavior intention and behavior intention is influenced by attitude towards the specific behavior, assumptions of what significant others think about the behavior (subjective norm), and perceived control of behavior. From research on attitude and attitude change, we know (Chaiken & Trope, 1999) that social perception influences attitude formation. Thus, if one's perception is biased, it is likely that their attitude and their following behavior are inappropriate. For example, a teacher with a strong bias to detect all possible misbehaviors will perceive a student more likely as liar and will therefore very likely intend to and actually punish the student for misbehavior. Moreover, the teacher will justify his or her behavior in a goal-directed manner (cf. Kunda, 1990). Thus, it's not biased perception that is problematic, but rather the consequences concerning intention and behavior, the justification of the behavior, and following behavior.

Research from deception detection indicates that teachers tend to judge students' statements as being true, i.e., showing a so called truth bias (Reinhard, Dickhäuser, Marksteiner, & Sporer, 2011). Thus, one could assume that teachers are generally more defense motivated (e.g., defending their attitude that their students are good people) than accuracy motivated, or pursue a directional goal (e.g., to avoid wrong accusation) rather than an accuracy goal. This defense motivation or directional goal can lead to a truth bias: in order to defend their attitude that their students are good people or in order to pursue their directional goal to avoid wrong accusation, teachers tend to judge their students' statements as true. The truth bias can be explained by the fact that teachers seem to be more concerned with avoiding wrongful accusation than detecting deception when it comes to cheating on a test (Reinhard, Marksteiner, & Dickhäuser, 2011). These two tendencies (avoiding wrongful accusation and detecting deception) can be seen as two forms of defense motivation (according to Chen & Chaiken, 1999) or two directional goals (according to Kunda, 1990). While the tendency to

avoid wrongful accusation might lead – as stated above – to a truth bias, the latter could lead to a lie bias (i.e., the tendency to judge statements as being invented).

The present study

In Study 1, teachers are asked to describe in what situations they had actually interviewed or would theoretically interview students about lying to them. Teachers' perceptions of each described situation concerning importance of deception detection and frequency of occurrence was investigated. Regarding the functioning of schools (Huisken, 2007) we predict that teachers will mostly describe (actually experienced) situations with rather light consequences for others compared to severe consequences (Hypothesis 1). Moreover, because of the availability heuristic (Tversky & Kahneman, 1973), we assume that the situations described most often are also perceived as more frequently occurring than others (Hypothesis 2). Furthermore, because of the cultivation effect (Shrum & O'Guinn, 1993) we hypothesize that bullying situations will also be described as more frequently occurring (Hypothesis 3). According to the findings on the belief in a just world (Lerner, 1980), implicit egotism (see Kassin et al., 2011, for more details), and self-serving attributions (McAllister, 1996) we assume that teachers will state that deceitful situations more often occur to their colleagues than to themselves (Hypothesis 4). Moreover, we hypothesize that situations with severe consequences for others (cf. Rigby, 2003) will be judged as more important in regard to deception detection (Hypothesis 5).

Study 1

Method

Participants. In total, 41 teachers (68.3% female) participated; three were already retired. On average, participants were 40.95 (SD = 12.46) years old and had been in service for 10.18 (SD = 11.01) years (Min = 1, Max = 37; one person did not answer the question). More than half of the participants (53.7%) taught at a Grammar School (Gymnasium) and

around one third (34.1%) taught at a vocational school (berufliche Schule). The rest (12.2 %) were teachers at other types of schools. The schools were all located in Germany.

   Procedure. Participants received either an online link via E-Mail or a paper-pencil questionnaire. Both versions (digital and printed) were identical. They received no reimbursement for participation, but were offered the opportunity to enquire about the results of the study. On the first two pages of the questionnaire, participants were given a short overview of the procedure of the study. Afterwards, demographical questions about occupation, gender, age, working experience (in years), type of school and subjects taught were to be answered. On page 3 participants were instructed to describe three situations where they actually had or hypothetically would interrogate a student in order to find out if the student was lying or telling the truth. The instructions were as followed:

> The present study aims at gaining detailed insight into what kind of situations teachers hypothetically would or actually have interrogated students to find out whether they are lying or telling the truth. Below, we would like to ask you to describe in detail three of these kinds of situations and evaluate the situations on different scales.

   Then, participants were asked to describe the situations in their own words and to specify for each situation if it was one they actually had experienced or if it was a hypothetical one which they never had experienced in person. They were also asked to specify on a scale from 1 (= not at all important) to 10 (= extremely important) for each situation how important the detection of deception in this particular situation was. Moreover, they indicated for each situation (1) on a scale from 1 to 5 (1 = rarely, 5 = often) how frequently the described situation occurs in everyday school life and (2) how often they, or a colleague had already experienced the described situation (1 = rarely, 5 = often). Finally, participants were thanked for participation and were given the opportunity to receive further information.

Results

Situation Categories. In total, 111 situations were described, most of which (67.6%) participants reported as having actually experienced. All situations were categorized by two independent raters (Cohen's kappa = .94) in the following categories: (1) *use of unfair means*, (2) *aggressive behavior*, (3) *theft*, (4) *absent without permission*, (5) *bullying*, (6) *vandalism*, and (9) *rest category.* For an overview see Table 1.

Table 1

Categorization of the described situations overall and depending on experience status (actually experienced vs. hypothetically) in Study 1

	Categorization		
	Overall	**Experience status**	
Category	**N (%)**	**Actually experienced N (%)**	**Hypothetical N (%)**
Use of unfair means	29 (26.1)	21 (28.0)	8 (24.2)
Aggressive behavior	8 (7.2)	4 (5.3)	4 (12.1)
Theft	13 (11.7)	5 (6.7)	7 (21.1)
Absent without permission	28 (25.2)	22 (29.3)	5 (15.2)
Bullying	11 (9.9)	7 (9.3)	4 (12.1)
Vandalism	7 (6.3)	5 (6.7)	2 (6.1)
Rest category	15 (13.5)	11 (14.7)	3 (9.1)
In total	111 (100)	75 (100)	33 (100)

Note. For three situations participants didn't indicate if the situations were actually experienced or hypothetical.

The most frequently described situations overall were *use of unfair means*, *theft*, *absent without permission*, *bullying*, and situations categorized to the *rest category*. As expected (Hypothesis 1), the most frequently described actually experienced situations were *use of unfair means*, *absent without permission* and the situations categorized to the *rest category*. Both situations (*use of unfair means* and *absent without permission*) can be seen as having rather light consequences for others or no consequences at all for others compared to the other described (actually experienced situations).

Perceived frequency of occurrence. On average, the situations were overall perceived as $M = 3.18$ ($SD = 1.51$) frequently occurring. This mean did not differ significantly from the scale midpoint 3, $p = .10$. The situations that were perceived as most frequently occurring were use of unfair means *(M = 3.25, SD = 1.11)*, absent without permission *(M = 3.39, SD = 1.17)*, bullying *(M = 3.27, SD = 0.79)* and the situations categorized to the rest category *(M = 3.20, SD = 1.52)*. These results support Hypothesis 2 and Hypothesis 3. Moreover, the results of paired t-Tests indicate that participants perceive the frequency of occurrence of all situations as lower for themselves *(M = 2.88, SD = 1.09)* compared to colleagues *(M = 3.20, SD = 1.03)*, $t(83) = -3.03$, $p = .003$, but not compared to teachers overall *(M = 3.05, SD = 1.15)*, $t(83) = 1.52$, $p = .13$. Those situations were also perceived to occur more frequently among colleagues compared to teachers overall, $t(83) = -2.19$, $p = .03$. An overview of the results can be seen in Table 2.

Table 2
Perceived frequency of occurrence of situation overall, by oneself, and by colleagues in Study 1

	Perceived frequency of occurrence of situation								
	Overall (*N* = 110)			**By oneself** (*N* = 84)			**By colleagues** (*N* = 84)		
Category	*M* *(SD)*	**Min**	**Max**	*M* *(SD)*	**Min**	**Max**	*M* *(SD)*	**Min**	**Max**
Use of unfair means	3.25 (1.11)	1	5	3.04 (1.19)	1	5	3.30 (1.06)	1	5
Aggressive behavior	2.88 (1.25)	1	5	2.71 (1.25)	1	5	3.14 (1.35)	1	5
Theft	2.85 (1.14)	1	5	2.09 (0.83)	1	4	2.91 (0.83)	2	4
Absent without permission	3.39 (1.17)	1	5	3.33 (0.98)	2	5	3.47 (0.92)	2	5
Bullying	3.27 (0.79)	2	4	2.40 (1.08)	1	4	3.30 (0.95)	1	4
Vandalism	2.86 (0.90)	1	4	3.00 (0.58)	2	4	2.71 (0.95)	1	4
Rest category	3.20 (1.52)	1	5	3.18 (1.08)	2	5	3.18 (1.25)	1	5
In total	3.18 (1.51)	1	5	2.88 (1.09)	1	5	3.20 (1.03)	1	5

For most situations participants assume that they will occur more often in another teacher's classroom than in their own. Only in situations where students vandalize, teachers perceive the frequency of occurrence as higher for themselves *(M = 3.00, SD = 0.58)* than for someone else *(M*$_{Overall}$ = 2.86, *SD*$_{Overall}$= 0.90; *M*$_{ByColleague}$ = 2.71, *SD*$_{ByColleague}$= 0.95). Thus, the results partially support Hypothesis 4.

Perceived importance of deception detection. On average, it is *M* = 4.44 (*SD* = 0.75) important to detect whether a student is lying or telling the truth. This mean was significantly lower than the scale midpoint 5.5, *t*(108) = -14.84, *p* < .001. The situation where deception detection was

perceived as being mostly important was vandalism *(M = 4.86, SD = 0.38)*, aggressive behavior *(M = 4.75, SD = 0.46)*, bullying *(M = 4.73, SD = 0.47)* and the rest category *(M = 4.67, SD = 0.48)*. These results support Hypothesis 5. Next, deception detection was perceived as relatively less important when it comes to absent without permission *(M = 4.17, SD = 0.91)*, use of unfair means *(M = 4.32, SD = 0.77)* or theft *(M = 4.31, SD = 0.86)*. See Table 3 for an overview of perceived importance.

Table 3

Perceived importance of detecting deception overall and depending on experience status (actually experienced vs. hypothetically) in Study 1

	Perceived frequency of occurrence of situation				
	Overall (*N* = 110)			By oneself (*N* = 84)	
Category				**Actually experienced**	**Hypothetical**
	M (SD)	**Min**	**Max**	**M (SD)**	**M (SD)**
Use of unfair means	4.32 (0.77)	3	5	4.24 (0.77)	4.57 (0.79)
Aggressive behavior	4.75 (0.46)	4	5	4.50 (0.58)	5.00 (0.00)
Theft	4.31 (0.86)	3	5	4.40 (0.89)	4.43 (0.79)
Absent without permission	4.17 (0.91)	2	5	3.98 (0.93)	4.80 (0.45)
Bullying	4.73 (0.47)	4	5	4.57 (0.54)	5.00 (0.00)
Vandalism	4.86 (0.38)	4	5	4.80 (0.45)	5.00 (0.00)
Rest category	4.67 (0.48)	4	5	4.64 (0.51)	4.67 (0.58)
In total	4.44 (0.75)	2	5	4.32 (0.77)	4.72 (0.58)

The standard deviation indicates how consistent the importance ratings were across teachers. Half of the situations have a standard deviation below 0.50, which can be interpreted as of relatively high consistency compared to the three situations where the standard deviation is above 0.75 (use of unfair means, theft, absent without permission). In those three situations participants' evaluation of the perceived importance of deception detection varied from average importance to high importance. The pattern is similar across experienced and hypothetical situations.

Discussion Study 1

Study 1 explored situations where teachers assumed students would lie/had lied to them. Over 100 situations were described, most of which were actually experienced. All situations were categorized (use of unfair means, aggressive behavior, theft, absent without permission, bullying, vandalism, and rest category). As expected, the use of unfair means and absent without permission were most frequently described. Both situations can be seen as having rather light consequences for others or no consequences at all for others compared to the other described (actually experienced situations). Thus, Hypothesis 1 can be seen as being confirmed.

Moreover, the situations overall were perceived as occurring with average frequency. As expected, the situations that were perceived as most frequently occurring were use of unfair means, absent without permission, bullying and the situations categorized to the rest category. Thus, the results support Hypothesis 2 and Hypothesis 3 and are in line with the assumption that accessibility (see Tversky & Kahnemann, 1973, for more details) can be seen as a prominent factor for frequency of occurrence ratings. Moreover, participants perceive the frequency of occurrence of all situations as lower for themselves compared to colleagues (Hypothesis 4). Thus, it seems as though they assume that the mentioned situations occur more frequently in a colleague's classroom than in one's own classroom. These results may be explained by teachers' belief in a just world (Lerner, 1980) and implicit egotism (see Kassin et al., 2011, for more details): A teacher might belief, that everyone earns what they deserve (i.e., belief in a just world). But at the

same time he or she might be convinced that he/she is a better person (i.e., implicit egotism) than others are. Thus, deceitful situations might happen more often to colleagues than to him. Only in situations where students vandalize, teachers perceive the frequency of occurrence as higher in their own classroom than in someone else's. Thus, the results concerning vandalism can't support the hypothesis. One explanation might be that the described vandalism-situations don't involve the teacher directly while in the other situations the teacher himself or herself or one of his or her students might be directly involved in the incident. Therefore, being a good person might not play such an important role in this kind of situation and neither might the concept of the belief in a just world or implicit egotism.

On average, participants rated the importance of detecting whether or not a student is lying as rather low. The situations where deception detection was perceived as being mostly important were all situations where either another person or an object was affected, i.e., vandalism, aggressive behavior, and bullying (Hypothesis 5). Perceiving situations with severe consequences as important concerning deception detection can be seen as a proper reaction to these kind of deceitful situations, since bullying and aggressive behavior can affect psychological and physiological factors (cf. Rigby, 2003).

Study 1 has a rather explorative character and uses a qualitative as well as a quantitative approach, because we rather focused on the kind of situations teachers had actually experienced or in what kind of situations they would hypothetically investigate whether a student was lying to them or not. As stated above, those situations were categorized. Thus, the comparison of the ratings between the different situations would be possible, but the ratings would base not on one and the same situation. Therefore, the explanatory power of the results would be rather weak. In order to give the comparison a higher informative value, in Study 2 we used standardized situations. Thus, the ratings would be based on one and the same situation.

As in Study 1, regarding the functioning of schools (cf. Huisken, 2007), we predict that teachers will perceive situations with rather light consequences for others as more frequently occurring than situations with severe consequences (Hypothesis 1). Also like in Study 1, according to the cultivation effect (Shrum & O'Guinn, 1993) we

hypothesize that bullying situations will also be described as more frequently occurring (Hypothesis 2). Moreover, in Study 2 we also asked for importance ratings but specified them in line with theoretical assumptions of the HSM (Chen & Chaiken, 1999) and Kunda (1990). Because of the tendency of teachers to judge student statements as being true (Reinhard, Dickhäuser et al., 2011) and because they are more concerned about avoiding wrongful accusation (compared to detecting deception; Reinhard, Marksteiner et al., 2011) we assume that teachers will assess the goal to avoid wrongful accusation as more important than the goal to detect misbehavior (Hypothesis 3). Again, regarding severe consequences following certain reactions (cf. Rigby, 2003) we predict that teachers will give, for all goals, higher importance ratings for situations with severe compared to light consequences (Hypothesis 4).

Study 2

Method

Participants. In total, 124 teachers (54.8% female) participated in this second study. Two of them were already retired. On average, participants were 44.36 (*SD* = 11.95) years old and were in service for 15.18 (*SD* = 11.84) years (Min = 0, Max = 40.75; one person was still a student teacher). About one third of the participants (30.6%) taught at a Gymnasium and around one third (33.9%) taught at an occupational school (berufliche Schule). The rest of the participants were teachers at Realschule (16.1%), Werkreal-/Hauptschule (12.9%) or taught elsewhere (6.5%). The schools were all located in Germany.

Procedure. As in Study 1, participants were sent either an online link or a paper-pencil questionnaire with identical in content and received no reimbursement for participation but the opportunity to receive feedback.

First, participants were given a short overview of the procedure of the study. Afterwards, demographical questions about occupation, gender, age, working experience (in years), type of school and taught subjects were asked. Next, participants were presented seven deceitful situations, in which one or more students misbehaved. Each situation description began with the sentence "Imagine you are a teacher of a class in which…". The situations were presented in a randomized order to

prevent order effects (see Cozby, 2009, for more details). The situations were developed in line with the results of Study 1. In one situation (*use of unfair means*) participants had to imagine that their students had written an exam and they suspected some students to have cheated. To find out if they had used unfair means they interviewed the suspected students. In another situation they had to imagine that one student injured his or her arm because he or she was pushed by another student but doesn't know who it was. To find out the details of the situation the teacher asks several students who were around when it happened (*aggressive behavior*). Yet another situation described how the teacher's USB-stick was stolen (*theft*). Furthermore, one situation was about some students who arrived late at class and the teacher interviews them about their late appearance after class (*absent without permission*). Two situations described bullying incidents. One was about a student who finds a letter with threatening content addressed to him in his bag and asks the teacher for help (*bullying*). The other was a more general bullying-situation where a student is harassed verbally and through ostracism over several months (*bullying over longer period*). One situation dealt with *vandalism*: The teacher arrives at his/her classroom and has to discover that some tables were damaged with colored pens. To resolve the incident, the teacher interviews some students.

As in Study 1, participants specified for each situation how important the detection of deception was. Then, three statements describing three different goals were presented which had to be rated in matters of (1) how important it was for the teachers to pursue this goal in the specific situation (rating pursue goal) and (2) how important it was to reach this goal in the specific situation (rating reach goal). The first goal was "to give an accurate and objective judgment" (goal: accurate judgment), the second "to not wrongly accuse a student to have misbehaved" (goal: avoiding wrongful accusation), and the third goal "to detect misbehavior of a student" (goal: detecting misbehavior). Moreover, they were asked to indicate for each situation on a scale from 1 to 7 (1 = rarely, 5 = often) how frequently the described situation occurs in everyday school life. In the end, participants were thanked for participation.

Results

Perceived frequency of occurrence. A Kolmogorov-Smirnov test of normality shows that the distribution for the dependent variable of perceived frequency of occurrence was non-normal for all situations, all ps < .001. The results of a Friedman's ANOVA showed that the perceived frequency of occurrence was significantly different between the seven situations, $\chi^2(6) = 217.98$, $p < .001$. Wilcoxon tests were used to follow up this finding. A Bonferroni correction was applied and so all effects are reported at a .0024 level of significance. The results are shown in Table 4 and indicate that *theft* also occurs least frequently *(M = 2.10, SD = 1.31)* compared to the other scenarios, all ps < .002. As expected (Hypothesis 1), *absent without permission* and *use of unfair means* are seen as most frequently occurring, all ps < .002. Also as hypothesized (Hypothesis 2), *bullying over longer period* was perceived as more frequently occurring as *use of unfair means* and *absent without permission*. Moreover, *vandalism* was also seen as most frequently occurring compared to the other means. Furthermore, the results indicate that *bullying*and *aggressive behavior* are rated as occurring less frequently (see Table 4 for means).

Table 4

Perceived frequency of occurrence and perceived importance of pursuing and reaching a certain goal (accurate judgment, avoid wrongful accusation, detecting misbehavior) for all situations in Study 2

	Dependent measurements			
	Goal			**Perceived frequency of occurrence**
Category	**Accurate judgment**	**Avoid wrongful accusation**	**Detecting misbehavior**	
	M (SD)	*M (SD)*	*M (SD)*	*M (SD)*
Use of unfair means	3.92[a] * (1.20)	4.02[a] * (1.14)	3.63[a] ° (1.22)	4.21[c] (1.68)
Aggressive behavior	4.44[c] * (0.78)	4.51[c] * (0.69)	4.28[c] ° (0.91)	2.96[b] (1.58)
Theft	4.40[bc] * (0.87)	4.46[bc] * (0.77)	4.19[bc] ° (0.94)	2.10[a] (1.31)
Absent without permission	4.00[a] ° (1.08)	4.31[abc] * (0.90)	3.51[a] ~ (0.92)	4.60[c] (1.65)
Bullying	4.43[bc] * (0.85)	4.46[bc] * (0.83)	4.30[c] * (0.91)	3.16[b] (1.59)
Bullying over longer period	4.53[c] * (0.71)	4.53[c] * (0.69)	4.36[c] ° (0.81)	4.45[c] (1.64)
Vandalism	4.12[ab] *° (1.04)	4.21[ab] * (1.05)	3.97[b] ° (1.15)	4.36[c] (1.58)

Note. Indices [a], [b], [c], and [d] indicate significant differences between rankings *within each column* according to the results of the Wilcoxon tests. Indices *, °, ~ indicate differences between rankings *within each row* according to the results of the Wilcoxon tests.

Goal: accurate judgment. The two ratings (pursuit goal and reach goal) for each of the seven situations were summed up to indices (all rs > .66) by first adding both ratings and then dividing the result by two. Importance of pursuing/reaching the goal of an accurate judgment was for all situations non-normally, all ps < .001. Friedman's ANOVA showed that the importance of pursuing/reaching the goal of making an accurate judgment significantly varied across the seven different situations, $\chi^2(6) = 43.91$, $p < .001$. All effects are reported at a .0024

level of significance. The results (Table 4) indicate that the *use of unfair means* and *absent without permission* are rated as situations in which it is relatively less important to make accurate judgments, while *aggressive behavior* and *bullying over a longer period* are rated as situations in which it is relatively important to make an accurate judgment. *Theft* and a letter with violent content (*bullying*) are seen as situations in which – compared to the other situations – it is of average to high importance to make an accurate judgment, whereas *vandalism* is a situation in which - compared to the other situations - it is of average to low importance to make an accurate judgment.

Goal: avoid wrongful accusation. Again, the two ratings (pursuit goal and reach goal) for each of the seven situations were summed up to indices (all rs > .72) by first adding both ratings and then dividing by two. Importance of pursuing/reaching the goal of an accurate judgment was for all situations non-normal, all ps < .001. Friedman's ANOVA showed that the importance of pursuing/reaching the goal to avoid wrongful accusation was significantly different between the seven situations, $\chi^2(6) = 23.58$, $p = .001$. The results (Table 4) indicate that, again, *use of unfair means* is rated as a situation in which it is considered as relatively unimportant to avoid accusing a student wrongfully, while (like for the goal of making an accurate judgment) *aggressive behavior* and *bullying over longer period* are rated as situations in which it is of relatively high importance to avoid wrongful accusation. And much like for the goal of making an accurate judgment, *theft* and *bullying* are seen as situations in which – compared to the other situations – it is of average to high importance to avoid wrongful accusation, whereas – again – *vandalism* is a situation in which - compared to the other situations - it is of average to low importance to make an accurate judgment. But this time, *use of unfair means* is seen as being of low to average to high importance to avoid wrongful accusation.

Goal: detecting misbehavior. As before, the two ratings (pursuit goal and reach goal) for each of the seven situations were summed up to indices (all rs > .72) by first adding both ratings and then dividing the result by two. Importance of pursuing/reaching the goal of detecting misbehavior was non-normal for all situations, all ps < .001. Friedman's ANOVA showed that the importance of pursuing/reaching the goal to

avoid wrongful accusation was significantly different between the seven situations, $\chi^2(6) = 93.55$, $p < .001$. The results (Table 4) indicate that, much like for the goal of making an accurate judgment *use of unfair means* and *absent without permission* are rated as situations in which it is of relatively little importance to detect whether the student is lying or not, while (similar to the two goals) *aggressive behavior*, *bullying*and *bullying over longer period* are rated as situations in which it is of relatively high importance to detect a student's misbehavior. And, much like for the other two goals, *vandalism* is a situation in which - compared to the other situations – it is of average importance to detect a student's misbehavior. Again, *theft* is seen as a situation in which it is – compared to the other situations – middle to highly important to detect whether a student has actually stolen something or not.

Between-goal comparison. Before, we made a within-goal comparison to investigate what situations were perceived as being of higher or lower importance concerning the pursuing and reaching one of the three goals. Now we applied a between-goals comparison to test what goal was perceived as more or less important to pursue or reach within each situation. The results of several Friedman's ANOVAs showed that the importance of pursuing/reaching one of the goals was significantly different for each situation, all ps $< .027$. All effects are reported at a .0167 level of significance. The results (Table 4) indicate that for most situations it is perceived as being of relatively high importance to pursuit and reach the goal of making an accurate judgment and to avoid wrongful accusation; participants perceived the goal to detect misbehavior as relatively unimportant (see Table 4 for means and standard deviations). In the situation *absent without permission*, participants perceived the goal to avoid wrongful accusation as most important *(M = 4.31)*, in making an accurate judgment as second most important *(M = 4.00)*, and to detect misbehavior *(M = 3.51)* as least important. Thus, Hypothesis 3 is partially supported. When it comes to *bullying*, participants perceived all goals as equally important $(M_{accjudg} = 4.43; M_{wrongacc} = 4.46; M_{detectmis} = 4.30)$. Thus, Hypothesis 4 can be seen as confirmed.

Discussion Study 2

In Study 2, we used standardized situations in order to compare ratings between situations. Teachers were asked to rate those situations concerning perceived frequency of occurrence and importance of reaching and pursuing a certain goal.

As expected, *absent without permission* and *use of unfair means* are seen as most frequently occurring, supporting Hypothesis 1 which assumed that teachers will perceive situations with rather light consequences for others as more frequently occurring than situations with severe consequences. *Absent without permission* and *use of unfair means* are both misbehaviors where another student is not directly addressed. The severity of the consequences was not rated but one could assume that especially these two mentioned situations have rather light consequences. For example, a student who is attending class too late or not at all misses some taught knowledge but he or she can easily make this up by studying on his or her own. Also, as hypothesized (Hypothesis 2), *bullying over longer period* was perceived as frequently occurring as *use of unfair means* and *absent without permission*. While the latter two misbehaviors seem to have rather light consequences for the student him- or herself and none direct ones for others, *bullyingover a longer period* has severe consequences especially for the bullied ones (cf. Rigby, 2003). If this misbehavior occurred very frequently in everyday school life, it would lead to a disfunctioning of the school (cf. Huisken, 2007). So why would it be perceived as rather frequently occurring? One cognitive explanation is the cultivation effect (Schrum & O'Guinn, 1993), as already stated above, which assumes that media reports about a certain topic like bullying would make this kind of misbehavior cognitively accessible and will therefore positively influence the perceived frequency of occurrence ratings. Moreover, vandalism was also seen as frequently occurring compared to the other means. This finding can also be explained by the cultivation effect: vandalism seems to be also a prominent topic in media reports (Wawrzitz, 2011, p. 8).

Concerning the three goals, the results of within-goal comparisons indicate that for all three goals use of unfair means and absent without permission are rated as situations in which it is – in the eyes of teachers

– of relatively little importance to make accurate judgments, avoid wrongful accusation, and detect misbehavior, while aggressive behavior and bullying over a longer period are rated as situations in which it is relatively important to make accurate judgments, avoid wrongful accusation, and detect misbehavior. Thus, on the one hand it seems teachers perceive situations where there might be long term consequences for other students, such as bullying and aggressive behavior, as situations in which it is seen as relatively important to pursuit and reach these goals. On the other hand, situations where there are only (direct) consequences for misbehaving students (like use of unfair means and absent without permission) are perceived as relatively unimportant situations. This finding supports Hypothesis 4 which states that teachers will give for all goals higher importance ratings for situations with severe compared to light consequences. More interestingly, the results indicate that for most situations it is perceived as being of relatively high importance to pursuit and reach the goal to avoid wrongful accusation (and of making an accurate judgment) while participants perceived the goal to detect misbehavior as relatively unimportant. These findings support Hypothesis 3 which stated that teachers will assess the goal to avoid wrongful accusation as more important than the goal to detect misbehavior. This can be explained by the truth bias (Reinhard, Dickhäuser et al., 2011): The truth bias might be a result of the teachers' tendency to care more about the teacher-student-relationship which can be protected by avoiding accusing the student of misbehaving. This assumption is supported by the results of Reinhard, Marksteiner et al. (2011) which indicate that teachers are more concerned about wrongfully accusing a student of misbehaving than finding out if a student is lying or not.

General Discussion

As stated above, Study 1 explored in what kind of deceitful situations teachers had actually interviewed or would theoretically interview students about lying to them. In Study 2, we investigated how deceitful situations are perceived with respect to importance of detecting attempts of deception and frequency of occurrence.

   As expected, in Study 1 use of unfair means and being absent without

permission were most frequently described. Both situations can be seen as having rather light consequences for others, or no consequences at all for others compared to the other described (actually experienced situations). Also, as expected, in Study 1 those two situations and bullying were seen as the most frequently occurring situations. This is in line with the findings of Study 2 where also being absent without permission, use of unfair means, and bullying (over longer period) are seen as most frequently occurring. The first two situations have rather light consequences, if any, for another student and, thus, are not expected to affect the functioning of everyday school life. Bullying, which doesn't fall into the category of light consequences for others, is also perceived as frequently occurring. The explanation lies within the cultivation effect which states that media reports influence the perception of frequency of occurrence of crime. Since bullying seems to be a prominent topic in media, it should be cognitively accessible and, therefore, rated as often occurring.

   In Study 1, the situations bullying, aggressive behavior, and vandalism were perceived as situations where it is most important to detect whether a student is lying or telling the truth. This is in line with the findings of Study 2, where aggressive behavior and bullying over a longer period are rated as situations in which it is perceived to be of relatively high importance to make an accurate judgment, avoid wrongful accusation, and detect misbehavior. These findings can be explained by the common feature that these situations share: In bullying situations as well as in situations where aggressive behavior occurs, one or more students misbehave in a manner that affects another student who might suffer from severe physical and/or psychological consequences (cf. Rigby, 2003). Thus, it seems to be highly appropriate for teachers to give high importance ratings for these kinds of situations.

Practical implications and future research

As the results of Study 2 indicate, teachers' ratings of importance, the detection of truth and lie, the importance of avoiding wrongful accusation, and the detection of misbehavior are highest for bullying and aggressive behavior which shows the high importance of pupils' welfare in school. Furthermore, the results of Study 1 indicate that lower

and middle grade students seem to lie more frequently when they show violent behavior like aggressions, or bullying than adolescents do, and since the results of Study 2 indicate that those situations are rated highest with respect to the importance of detection shows that teachers will be likely to try to detect this type of behavior. Thus, they will put greater effort into dealing with detection of pupils' misbehavior in lower and middle grade levels. And as these age groups seem more likely to show behavior that affects other pupils' psyche or physical well-being (e.g., Rigby, 2003), teachers are well-advised to pay attention to pupils who complain about this type of behavior. As a result, teachers are well-advised to interview the relevant persons in order to make an accurate judgment and to detect truth or lie. This can have repercussions on pupils' willingness to trust their teachers, as they know that teachers are likely to try to detect bullying or violent behavior in order to protect their pupils from physical or psychological harm.

Moreover, the results of Study 1 indicate that adolescents rather tend to lie when they engage in the use of unfair means, or are absent without permission (non-violent misbehavior) and, thus, rather seem to harm themselves and not others with their (mis)behavior. In this case, teachers are asked to take precautionary measures, e.g., to try to prevent the use of unfair means that could be used in examinations and to correct essays for plagiarism. In the case of being absent without permission, teachers should try to find out if the pupil has been absent without permission habitually. Furthermore, it might be a good rule to oblige pupils to give the teacher a medical certificate in case of illness and to contact the pupils' parents in the case of repeated absence.

The fact that most teachers expect middle grade students to lie suggests that there is a necessity for teachers to possess the ability to detect when their pupils are lying. Thus, they could attain information about the pupils involved from another teacher in order to find out if a pupil is lying or not. If the other teacher believes that a pupil tends to lie or tell the truth, the teacher can compare the other teachers' opinion with his or hers and might thus be more likely to make the right judgment.

Future research should focus on perceived versus actual features of deceitful situations. Knowing how often deceitful situations really occur, or if they are more typical for boys or for girls, and comparing these findings with perceived typicality might reduce inappropriate

reactions. This reduction can be yielded by making differences between actual and perceived features salient. Moreover, future research should focus on the motives that underlie judgment goals like those in Study 2. Those judgment goals can bias perception and – as stated above – lead to rather inadequate or unfair behavior. Thus, knowing the motives for these goals might help reducing biased social information processing.

Acknowledgements

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